GERMANY AND SWITZERLAND

JEREMY AYNSLEY

PRECEDING PAGE
240. Konstantin Grcic (b. 1965)
Chair_ONE, 2003
Made by Magis (Italy)
See plate 289.

BELOW
241. Wilhelm Kienzle (1886–1958)
Watering can, 1935
Reissued by Mewa Blattmann (Switzerland), 1991
Museum für Gestaltung, Zurich

OPPOSITE
242. Wilhelm Wagenfeld (1900–1990)
***Kubus* stackable glass containers**, 1938
Made by Vereinigte Lausitzer Glaswerke (Germany)
Molded glass
Cooper-Hewitt, National Design Museum, New York

From a contemporary perspective, it is clear that postwar design in Germany and Switzerland fulfilled the promise of early twentieth-century modernism while also questioning some of its basic principles and offering new ways of thinking. Both these countries had established reputations for design that put them in a good position to revive traditions after the trauma of World War II. The situation varied considerably between the two, however. In Germany, modern designers negotiated the political disruption, censorship, and fatal consequences of the Third Reich and ensuing war only to find themselves in a divided country in 1949, with the founding of the Federal Republic of Germany (FRG) allied to Western forces and the Soviet-oriented German Democratic Republic (GDR) in the east. By contrast, Switzerland, as a neutral country during the war, offered greater possibilities of cultural continuity, becoming a vital center for design during the troubled early postwar years. Poised between the design capitals of Paris and Milan, Switzerland attracted leading figures who taught in its art and design schools while working for national and international companies. At the beginning of the twenty-first century, in the context of a completely changed political map of Europe, a growing digital economy, and globalized markets, design in Germany and Switzerland is still commanding significant critical attention and acclaim.

It can be notoriously difficult and, at times, even dangerous to make generalizations about national styles or tendencies in design; unhelpful stereotypes may thus be created or reinforced. National character in design is often a construct developed through rhetoric, discourse, promotion, and advocacy as much as reality. Writing in 2007, the Swiss curator Claude Lichtenstein was well aware of this problem, and resisted too singular or simplified a characterization of his country's design, instead embracing the terms "paradox" and "contrast." He observed that Swiss design is rarely marked by "effusive indulgence" and tends to employ an "intelligent economy of means," not "expensive solutions." Swiss designers, he contended, "avoid theatricality" while still taking creative risks, which he saw as symptomatic of nonconformism.[1]

One design that fits such a definition is by Wilhelm Kienzle, a furniture designer who studied at the Schule für Gestaltung Basel from 1901 to 1905 and served as director of the interior design courses at Zurich's Kunstgewerbeschule until 1951. His *Zierpflanzen* (*Cactus*) watering can, originally designed in 1935, was reissued in 1991 (plate 241). Kienzle took into account the limited space of the narrow windowsill that such an apparently mundane object usually occupies, stressing verticality over horizontality. He enjoyed the idea that the watering can stood out "like a bird sitting in the bushes," made all the more striking through a vibrant use of color. With its extended neck, the *Cactus* revealed an early awareness of the ergonomics of pouring, yet its anthropomorphic wit and sense of self-deprecation also predicted postmodern design strategies, which no doubt added to its renewed appeal in the 1990s.[2]

BELOW
243. ***Die gute Form*, Schweizerische Werkbund (SWB) exhibition held in Zurich during the Zurich Festival**, June 1950
Museum für Gestaltung, Zurich

OPPOSITE
244. **Poster for another exhibition called *Die gute Form*, at the Gewerbemuseum Winterthur am Kirchplatz**, 1958
Museum für Gestaltung, Zurich

In the case of German design, numerous commentators have stressed how the legacy of the Bauhaus and Weimar functionalist traditions was realized, revived, or extended after the war, particularly in West Germany (plate 242). To take one instance, design writer Gwendolyn Ristant has commented that, at this time, officially sanctioned design in the Federal Republic generally followed from a belief in objectivity, or *Sachlichkeit*—frequently used as a word of approval in design writing. German style, she suggested, was "modest in appearance, functional in use, matter-of-fact, with neat right angles, in white, gray or black, without ornamentation, with no more than precise, technically necessary details."[3] The best-known exponent of such an approach is Dieter Rams, whose work for the Braun Electric Company from the mid-1950s onward epitomizes Ristant's description. Through Rams and others, "Design in Germany" became associated with well-engineered products of high-quality manufacture—marked by values such as durability and, later, sustainability—that earned their place in the canon of history of design, as well as museum collections worldwide.

A shared feature of Germany and Switzerland is that neither country has a single major center for design. Instead, both countries' political organization in the second half of the twentieth century favored federal and regional initiatives over national ones. In the case of Germany, this federal structure encourages regional capitals to function as cultural centers and draws designers to them. It is impossible to locate design solely in Berlin; Munich, Stuttgart, Hamburg, and Leipzig, to mention just a few larger cities, also function as important hubs. In Switzerland, a small country composed of twenty-six cantons, the major cities of Basel, Lausanne, and Zurich each have important design cultures, as do many smaller cities. Swiss identity is further complicated by the coexistence of four official languages, including Romansh. Inevitably, the French-, German-, and Italian-speaking regions have much in common with the country of their language as well as with each other.

BELOW
245. Max Bill (1908–1994)
Kitchen timer, 1956–57
Made by Junghans AG (Germany)
Musée des Arts Décoratifs, Paris

OPPOSITE
246. Gerd Alfred Müller (1932–1991)
Braun *KM3* food mixer with attachments, 1957
Made by Braun AG (Germany)
Museum of Modern Art, New York

PROMOTING "GOOD DESIGN"

For much of the twentieth century, one of the strongest preoccupations in official circles was to select examples of what was considered "good design" (*gute Form*). This term was used to distinguish design that followed the officially sanctioned principles of functionalism and modernism. Many educational and professional bodies engaged in the debate about "good design." The longest-standing design organizations, the German and Swiss Werkbund, were established respectively in 1907 and 1913 to nurture and promote good relations between designers, manufacturers, retailers, and consumers. Traveling exhibitions put out the message that design would contribute to future economic prosperity, citizen well-being, and cultural identity (plates 243–44). For instance, the exhibition *Wie Wohnen*? (How to Live?), shown in Stuttgart and Karlsruhe, was drawn from a competition organized by the Ministry of Finance in Baden-Württemberg. The first postwar design exhibition in Germany, it opened in December 1949. At a time of reconstruction, the catalog claimed, "the task set . . . was to design functional, durable, tasteful, and above all cost-effective furniture making the best possible use of the materials."[4]

Similar traveling exhibitions were organized by Max Bill, an important figure who long acted as a conduit for avant-garde design ideas between his native Switzerland and Germany. In the 1920s, Bill had studied at the Zurich Kunstgewerbeschule before enrolling at the Dessau Bauhaus. He spent the 1930s and '40s in Zurich, but was called back to Germany in 1953 to become the first rector of the Ulm Hochschule für Gestaltung (HfG). As a leading advocate of avant-garde and constructivist art, Bill believed design could improve the quality of life. His reduction of form to pure geometry and surface simplicity, grounded in European abstraction, was intended to shun associative values or accusations of "style" (plate 245).[5]

Dieter Rams, one of Germany's most prominent designers, also had close associations with the Ulm HfG, realizing its major principles in a long career as a product designer and important spokesperson for design. Rams changed the international face and reputation of German industrial design more than any other designer during the second half of the twentieth century, and his achievements have been recognized with countless awards and exhibitions. Joining Braun as an interior designer and architect in 1955, Rams became head of its design department by 1961 (plates 246–50). Rams has written about his design philosophy throughout his career, notably in a ten-point "manifesto": good design is innovative; it makes a product useful, aesthetically pleasing, and understandable; it is unobtrusive, honest, long-lasting, thorough down to the last detail, environmentally friendly, and as little designed as possible.

BELOW
247. Richard Fischer (b. 1935) and Dieter Rams (b. 1932)
***Sixtant 6007* razor**, 1973
Made by Braun AG (Germany)
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

BOTTOM
248. Reinhold Weiss (b. 1934)
***KSM 1/11* coffee grinders**, 1967
Made by Braun AG (Germany)
ABS plastic, polystyrene
Musée d'Art Moderne, Saint-Étienne Métropole

Adapting Mies van der Rohe's famous earlier dictum of "less is more," Rams concluded that "less is better."[6]

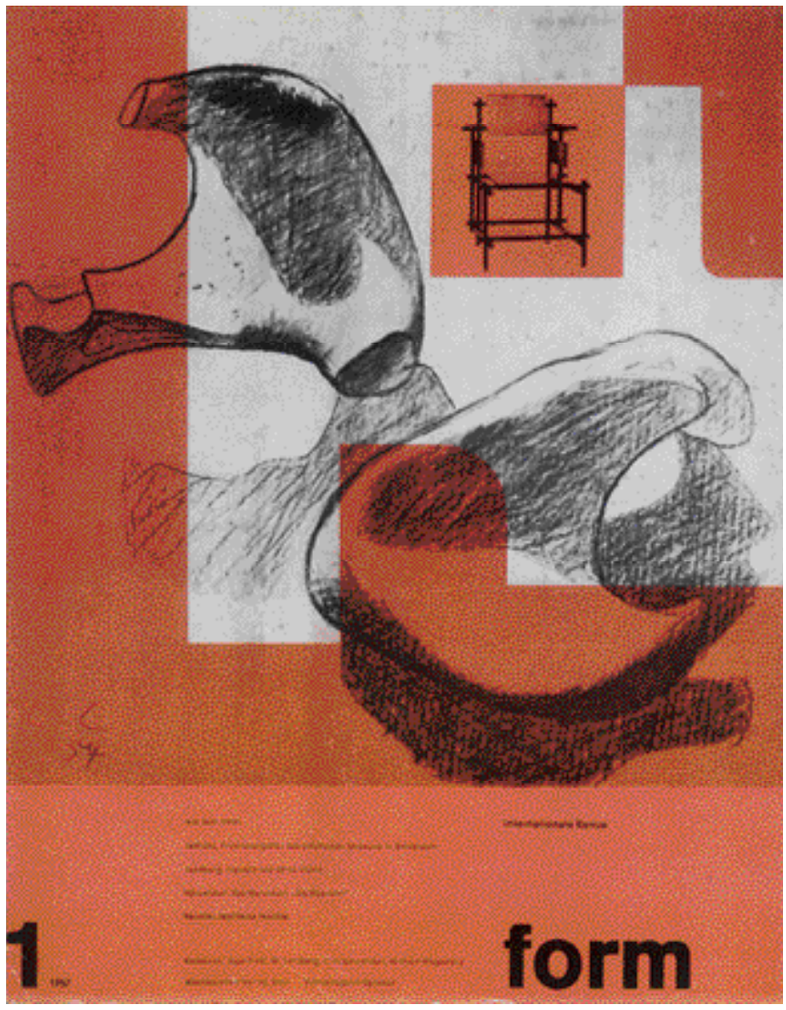
Through the 1950s, '60s, and '70s, Werkbund initiatives included exhibitions strongly didactic in orientation and favoring modern functionalism. Some consisted of cases of exemplary objects that traveled to colleges and schools to teach students—the country's future citizens—to recognize, understand, and appreciate good design. Inevitably, the enthusiastic zeal of these organs of approval came to be challenged by the late 1960s counterculture, the alternative political movements and ecological critique of the '70s, and the myriad consumer lifestyle choices of the '80s.[7] As public interest in design broadened, official taste came to be considered overly reductive or prescriptive. Design selection lost its appeal as it gave way to a more inclusive approach that interpreted design culturally, as a matter of personal preference, social engagement, or consumer enjoyment, rather than merely aesthetic judgment. A case in point is the designer Volker Albus, an important member of the new German design movement of the early 1980s, whose multimedia installations explored color, narrative, ornament, and glamour—all properties ostensibly denied by modernism.[8]

ABOVE
249. Hans Gugelot (1920–1965) and Dieter Rams (b. 1932)
***SK 4* turntable with radio**, 1956
Made by Braun AG (Germany)
Lacquered metal, plastic, wood
Museum of Modern Art, New York

LEFT
250. Dieter Rams (b. 1932)
***TFG 2* table lighter**, 1968
Made by Braun AG (Germany)
Plastic, painted and chrome-plated metal
Museum of Modern Art, New York

BELOW
251. **Cover of the first issue of *Form*, with a drawing by Le Corbusier and a photograph of a chair by Gerrit Rietveld**, 1957

OPPOSITE
252. **View of the spring trade fair in Leipzig**, March 1967



DISSEMINATING DESIGN

The second half of the twentieth century witnessed a significant growth in commentary on design in the form of magazine journalism. Among the titles that established Swiss and German design on the international stage were *Form* (1957– ; plate 251); *Werk und Zeit* (1952–2007), an organ of the German Werkbund; the official industrial design magazine of East Germany, *Form und Zweck* (later *form+zweck*; 1956–); and *Design Report* (1987–), published by the German Design Council (Rat für Formgebung).

In tune with changing attitudes and a rising popular interest in design, the late twentieth century also saw the emergence of the design museum as an institution distinct from the traditional museum of arts and crafts, or of decorative arts.

Two examples offer different perspectives on the question of curating modern design. The first, the Bauhaus Archiv, cares for the legacy of this most famous art and design school. The archive's research and exhibition program illuminates the teaching and design activities of the staff and students of the Bauhaus, and its continuing importance to contemporary design. The first Bauhaus Archiv was founded by Hans Maria Wingler in the Ernst-Ludwig-Haus on Mathildenhöhe in Darmstadt in 1960, based on bequests of former staff. Following its transfer to Berlin in 1971, the archive moved into a purpose-built gallery of Walter Gropius's own design in 1979. After the German reunification in 1990, a parallel collection-based exhibition and publication program developed at Dessau, and the school buildings and masters' houses there were restored in connection with their classification as a World Heritage Site in 1996. Meanwhile, the Bauhaus Museum Weimar has run a series of exhibitions since 1995, while building its permanent collection as part of the Klassik Stiftung Weimar.[9]

A contrasting curatorial project, located on the Swiss-German border, is the Vitra Museum. The Vitra furniture company was originally established by Willi Fehlbaum in Basel in 1934 and later moved to Weil am Rhein, just across the southwest border with Germany. In 1957, the firm obtained from Herman Miller the license to distribute the furniture of Charles and Ray Eames and George Nelson in Europe. Vitra's own collaboration with contemporary designers began with Verner Panton and his *Panton* chair of 1967. Willi Fehlbaum's son Rolf took the company in several

BELOW
253. Frank O. Gehry (b. 1929)
Vitra Design Museum, Weil am Rhein, Germany, 1989

OPPOSITE
254. **A display at the Vitra Design Museum, Weil am Rhein, Germany**

original directions. In Weil am Rhein, two new factories designed by British architect Nicholas Grimshaw were built in 1981 and 1986. In 1993, a fire station by Zaha Hadid and a conference pavilion by Tadao Ando were completed. Vitra became an international center, running workshops on themes in architecture and design and, most importantly, opening the Vitra Design Museum in a Frank O. Gehry building in 1989, under the direction of Alexander von Wegesack (plate 253). The museum houses part of the Fehlbaums' extensive collection of furniture (plate 254) and has formed the base for original curatorial projects and publications. Alongside this cultural curation, since 1987 Vitra Editions has allowed internationally acclaimed designers to develop projects in laboratory conditions, outside the normal restrictions of the marketplace.[10]

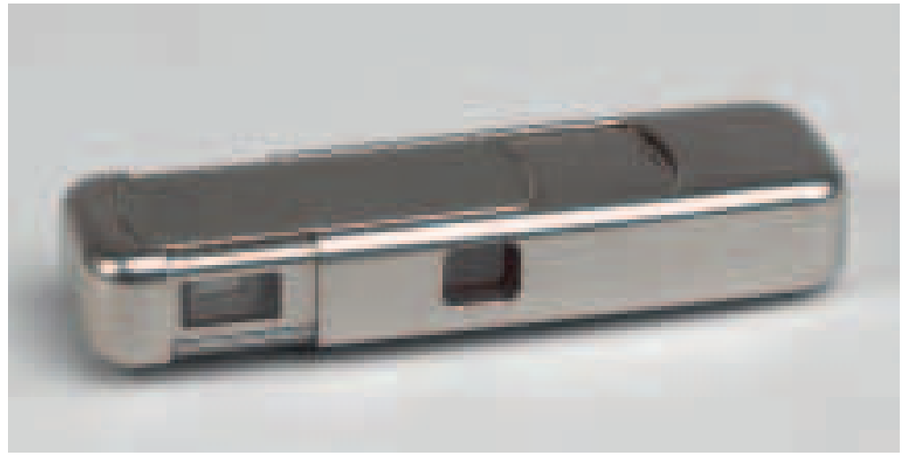
Other types of design museum include the Neue Sammlung, which opened in 2002 in the Pinakothek der Moderne in Munich as a permanent home for a collection already begun in the 1920s, and the Museum für Gestaltung, Zurich, which has adopted the format of the Kunsthalle, drawing on the historical and contemporary collections of the city's Arts and Crafts Museum for a program of innovative thematic exhibitions covering all genres of design.[11]

PRODUCTIVE NATIONS AND INDUSTRIAL DESIGN

In the reconfiguration of Europe under the European Recovery Program of 1947, more commonly known as the Marshall Plan, West Germany was recognized as crucial to the wider economic and political stabilization of the continent and benefited from substantial American financial investment, leading to its economic miracle, or *Wirtschaftswunder*, of the 1950s. Abundant reserves of coal and iron provided for the country's heavy industries,[12] while the federal government invested in engineering and technical education and set great store in design's benefits to industrial growth and the national economy. Consequently, West Germany became a leading producer of capital and consumer goods, with many thriving international companies, a position it maintained after political reunification in 1990. It is impossible to list all the companies that were recognized for their effective design policies, but one litmus test will provide some insight. In 1996, the Bundespreis Gute Form, an annual award for high-quality technical products whose "design combines functionality and aesthetics," honored cars from Audi and Porsche, Lamy pens, the Noblex *135 U Panorama* camera, Schindler elevators, Blanco Med medical equipment, and Rodenstock eyeglass frames.[13]

BELOW
255–56. Walter Zapp (1905–2003)
Minox *VEF Riga* miniature camera (shown open and closed), c. 1936
Made in Latvia 1937–43 and in Germany from 1948
Museum of Modern Art, New York

OPPOSITE
257. Ernst Leitz (1871–1956)
***IIIc* telemetric camera**, 1940–51
Made by Leica (Germany)



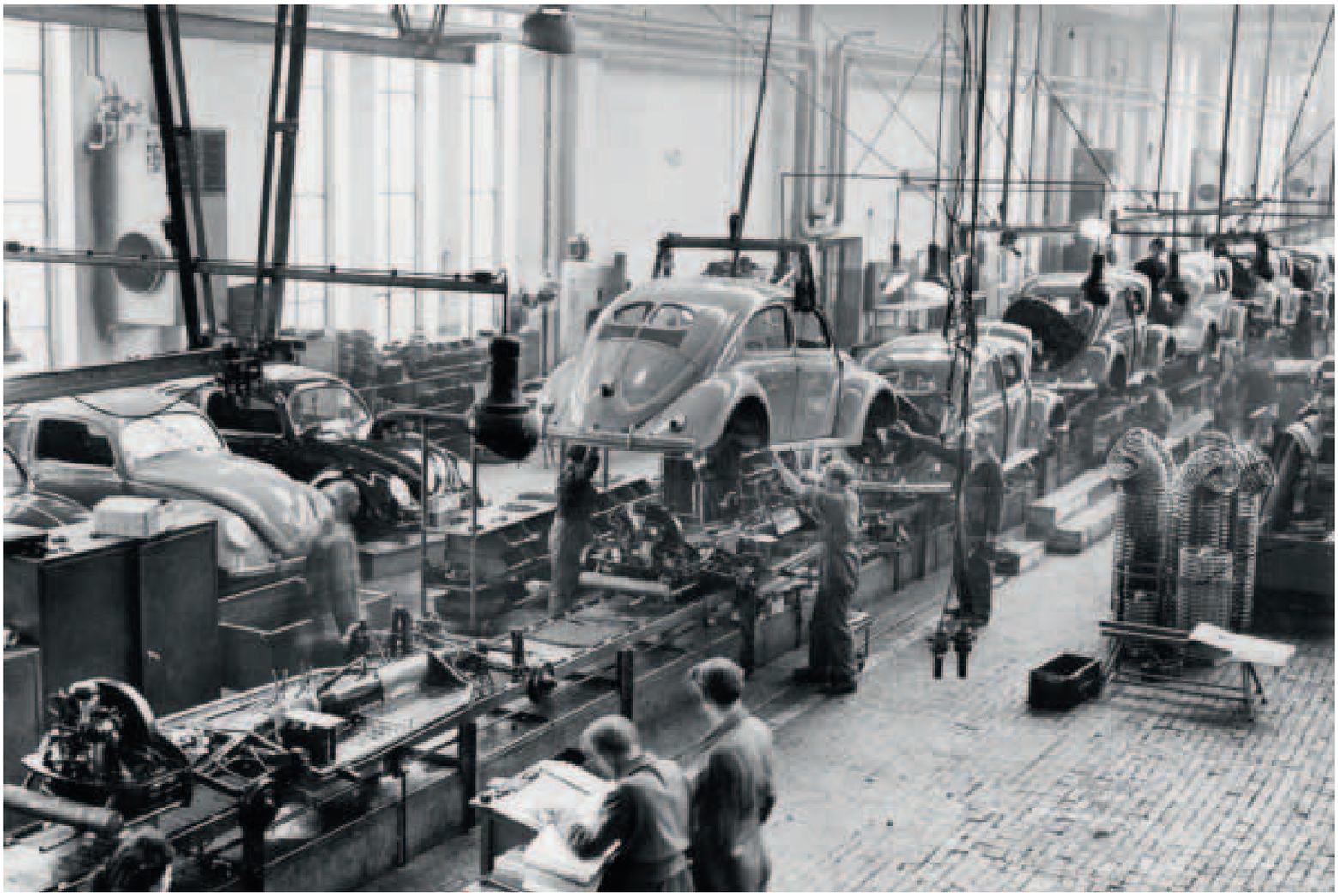
In the political context of the Cold War, the division of Germany meant that two design traditions evolved in ways that revealed both parallels and differences. Design in the Federal Republic of Germany, governed by consensus politics and a welfare-state democracy, was seen as an important means for the country to develop a consumer society. By contrast, under the command economy of the German Democratic Republic, the mission was to establish "real existing socialism," and design was marshaled to the cause of defining a new way of life ideologically and materially distinct from capitalism. East German designers faced decisions about how to combine the legacy of Weimar modernism, to which many were immediately drawn, with contemporary political imperatives. Alongside other Eastern European countries, the GDR established an identity as a productive nation and by the early 1960s was ninth in the league of the world's manufacturing nations.[14]

Many structures for design in the GDR mirrored those of the West. These included a central institute for the promotion of industrial design, founded in 1950; the dedicated design magazine *Form und Zweck*, which began publication in 1956; and annual design awards and exhibitions. Many important design institutes founded in the early twentieth century were also located in the Eastern bloc. The Leipziger Messe, a biannual trade fair, was an important venue to display consumer and capital goods for the export market (plate 252). Products of particular quality included Zeiss cameras and optical equipment, Jena glass for industrial and domestic use, and specialist industrial machinery.[15]

Much debate concentrated on how goods could both look and be "socialist" beyond banal decoration or the immediate iconography and symbolism of politics. Many modern designers risked being charged with "formalism" if their design solutions appeared too similar to those used in the West. Unlike West Germany, the East lacked key mineral resources and, out of necessity, instituted the Chemieprogramm in 1959 to develop its chemical industries, in part to make products for the home. One important debate was how to serve the most needs with the fewest resources. Accordingly, standardized systems of products found favor, such as Franz Ehrlich's 1957 collection of fitted furniture, the *Typensatz 602*, which was manufactured by the VEB Deutsche Werkstätten in Hellerau near Dresden, which had its origins in the distinguished Jugendstil workshop movement.[16]

Another priority in the GDR was to design products for use in the public as well as the private sphere. A notable example is *Rationell*, a stacking coffee service by

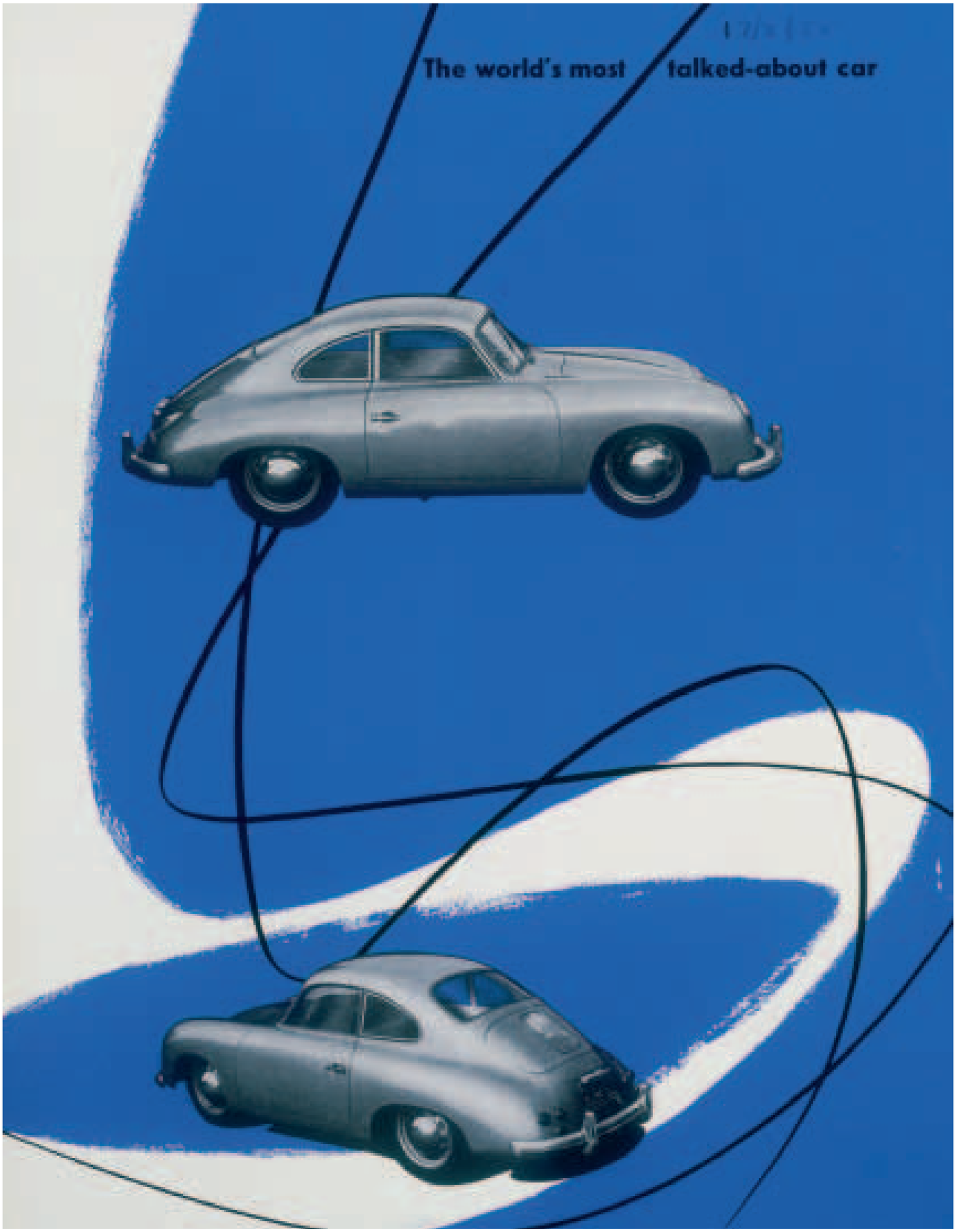

Leica
D.R.P
Ernst Leitz
Wetzlar
№394953



TOP
258. **Assembly line at the Volkswagen plant in Wolfsburg, Germany**, 1952

ABOVE
259. **Volkswagen *Export Type 1 ("Beetle")***, 1953
National Motor Museum, Beaulieu, U.K.

OPPOSITE
260. **Advertisement for the Porsche *356***, 1955
National Motor Museum, Beaulieu, U.K.


The world's most talked-about car

Margarete Jahny, which was produced in one version with a logo decoration for Mitropa, the catering division of the GDR state railway, and in another with a floral decoration for home use.

One particular field of West German prowess was automotive design, which took off when car ownership changed from being a luxury to a reasonable expectation for many middle-class families. Not surprisingly, the 1950s was a boom decade for the West German car, with the number of new owners per annum growing from 216,107 in 1950 to 1,503,000 in 1959.[17] The Volkswagen (literally "the people's car") was the first important small car in Germany, designed to appeal to first-time buyers. It was originally developed by Ferdinand Porsche under National Socialism, as part of the Kraft durch Freude (Strength through Joy) movement. Although initially intended as a response to Henry Ford's *Model T* in the U.S., before 1939 the Volkswagen was used only as a propaganda tool, and its production was diverted to military use. Not until after the war did it become a true consumer model, manufactured in Wolfsburg according to assembly-line principles (plate 258). With its rear engine and endearingly distinctive shape, the car became an international cult object by the 1960s (plate 259). Dubbed the "Beetle" (Käfer), it subsequently starred in Hollywood films. However, for all its popularity, the car's small backseat and rear engine were considered by some to be a disadvantage.[18]

The Volkwagen stood out all the more as most German car manufacturers gradually adopted body styles based on American patterns. The first Opel *Kadett* was manufactured between 1937 and 1940, but it was the second version, the *Kadett A*, introduced in 1961 at the directive of Opel's parent company General Motors, that presented a full-on challenge to the Volkswagen, as manifested its car's design (plate 262). Under a development team led by Opel product director Karl Stief, the *Kadett* was styled according to Detroit principles, with a large horizontal windshield, chrome trim, and a streamlined form. An elegant coupé version appeared in 1965. Even if it was smaller than most equivalent American models, the *Kadett*, available in bright colors, became popular with German motorists.[19] The

OPPOSITE, TOP
261. **Advertisement for the Trabant *601 Limousine Standard* and *Universal Standard*,** 1983

OPPOSITE, BOTTOM
262. **Opel *Kadett A* assembly line in Bochum, Germany,** 1962

ABOVE
263. **Parking lot at Marx-Engels-Platz in East Berlin with Trabant and Wartburg cars,** c. 1970

BELOW
264. ***R1200C* motorcycle**, 1997
Made by BMW (Germany)

OPPOSITE
265. ***300SL* "gullwing" coupé**, 1957
Made by Mercedes-Benz (Germany)
National Motor Museum, Beaulieu, U.K.

GDR introduced its own small car in 1958: the Trabant. The *Model 601*, produced between 1964 and 1990, had a body made from Duroplast, a plastic material reinforced by fibers (plates 261, 263).

Germany's reputation as a major automobile producer continues today with Audi, BMW (plate 264), and Mercedes-Benz (plate 265), all known for their carefully engineered high-performance vehicles. At the highest level of styling and performance, the successive generations of the Porsche family continue to lead the field for Germany, with a series of models that have eroded the distinction between the race car and the sports car (plate 260).

Volkswagen achieved another breakthrough when it commissioned Giorgetto Giugiaro, an Italian design star already known for his work with Maserati and Alfa Romeo, to create the *Golf*, which was introduced in 1974 (plate 266). Coinciding with the oil crisis and ensuing concerns about environmental sustainability, the *Golf* represented a further stage in the Europeanization of small cars for the city. The *Golf*'s straight, angular lines distinguished it from its predecessor, the *Beetle*. This first hatchback introduced a body style that would have a profound impact on car design around the world.[20]

While Switzerland may not manufacture automobiles, the country has made important contributions to the expanded field of transport design for road, rail, and flight, involving multidisciplinary teams embracing graphic, architectural, and product design. Ahead of its time when introduced in 1953, the distinctive winged-arrow logo designed by Rudolf Bircher of Zurich and Karl Gerstner of Basel for Swissair (1931–2002) asserted a strong visual presence alongside other nations' fleets (plate 268). The design was used not only

on the aircraft themselves but also on flight-crew uniforms, printed material, advertisements, and accessories, including popular flight bags. In 1978, Gerstner was entrusted with the renewal of the entire corporate identity.[21]

Deutsche Lufthansa, the West German state airline, also distinguished itself through design. In 1955, for instance, it commissioned an elegant in-flight tray service from Wilhelm Wagenfeld, the leading glass designer of the period. The company also employed Otl Aicher and his Gruppe E5 (consisting of students from the Ulm HfG), to develop its first corporate-identity manual in 1962.[22]

A few years earlier, the Swiss Federal Railways (Schweizerische Bundesbahnen, or SBB) had also become known for the high quality of its corporate identity and for its level of design awareness in the field of structural engineering. This involved the building of remarkable bridges, tunnels, and rail networks, providing a vital infrastructure for the country's extreme geography. The station platforms were overseen by Hans Hilfiker, a designer with an engineering background, who sought to provide passengers with the best possible information and amenities. In particular, he introduced a new system of concrete tubes to support light and elegant canopies that had a sculptural appearance and facilitated visibility by avoiding unnecessary columns. Hilfiker's station design incorporated his Swiss railway clock of 1944, to which he now added the famous red second hand. Moreover, all the station clocks were synchronized by a central system, which has come to be seen as a metaphor for the precision and efficiency of Switzerland (plate 267).[23]

A final example of a corporate identity for a complex national network with enormous reputational value is that commissioned by Deutsche Bahn, which was charged with standardizing and modernizing the German rail system after reunification. The company turned to Erik Spiekermann, Germany's foremost designer of typefaces for branding. He worked in collaboration with Christian Schwartz, and their design was broadly acclaimed, winning the Designpreis Bundesrepublik Deutschland in 2007.[24]

OPPOSITE
266. **Advertisement for the Volkswagen *Golf***, 1983
Private collection

TOP
267. Hans Hilfiker (1901–1993)
Swiss Federal Railways station clock, 1944 (redesigned 1952)
Museum für Gestaltung, Zurich

ABOVE
268. Rudolf Bircher (1911–2009) and Karl Gerstner (b. 1930)
Swissair logo, c. 1960

BELOW
269. **Advertising art for Herbert Hirche office furniture**, 1960s
Museum für Gestaltung, Zurich

OPPOSITE, TOP
270. Ludwig Walser (b. 1936)
Garden seat, 1959
Made by Eternit (Switzerland)
Fiber cement
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

OPPOSITE, BOTTOM
271. Willy Guhl (1915–2004)
Garden rocking chair, 1954
Made by Eternit (Switzerland)
Fiber cement
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

IDEAL AND REAL HOMES

In the interwar years, modern designers had frequently turned their attention to mass-housing schemes for the working classes, with furnishings to match, using such catchwords as "functionalism" (*Funktionalismus*), "necessity" (*Bedarf*), and "minimum existence" (*Minimum-Existenz*). While some designers remained committed to social causes and resisted the pull of the market, the rising standard of living meant that, by the 1960s, design was more often integrated into the modern lifestyle through consumer choice than social programs. For the domestic interior, "modern" could mean furniture manufactured in Scandinavian-inspired woods or chromed steel, with clean lines, fashionably organic shapes, and abstract patterns borrowed from modern art. Design advice manuals often advocated furniture made up of standard modular elements for easy storage. Textiles, ceramics, glassware, and metalware successively referenced concrete art, abstract expressionism, and Pop art. Such tendencies were prominent until alternative lifestyles offered a critique of the pursuit of the "ideal" home. The radical design movement of the late 1960s introduced informal seating and experimental new materials as a response to a generational change in social attitudes. As one indication of this larger shift, Susi and Ueli Baer—of the Swiss ad-hoc design collective Terreno, founded in 1971—created flexible environments for alternative lifestyles, with "inflated, expanded, folded, combined, stacked and knocked down furniture."[25]

Innovative furniture designs are regularly presented at the major trade fairs, such as the storied Triennale di Milano (plate 272) or the more recent Design Miami, as well as many other exhibitions in less expected venues. For example, at the G59 garden show in Zurich, what has been called the "lowest seat in Europe" was exhibited. The chair, designed by Willy Guhl

BELOW
272. ***Ideal Home* exhibition at the Triennale di Milano, with furniture designed by Egon Eiermann**, 1954

OPPOSITE, TOP
273. Egon Eiermann (1904–1970)
***SE 42* chairs**, 1949
Made by Wilde + Spieth (Germany)
Laminated wood
Private collection

OPPOSITE, BOTTOM LEFT
274. Dorothee Maurer-Becker (b. 1938)
***Uten.Silo* organizer**, 1969
Made by Ingo Maurer GmbH (Germany), then by Vitra (Switzerland)
Plastic

OPPOSITE, BOTTOM RIGHT
275. Egon Eiermann (1904–1970)
***E10* chair**, 1949
Made by Heinrich Murmann (Germany)
Rattan
Private collection

in 1954, combined a novel material (fiber-reinforced concrete) with an abstract sculptural form to produce a low rocking chair for the terrace or garden (plate 271).[26]

The World's Fairs also continued to be an important venue for judging the state of a nation's design. For West Germany, the 1958 Brussels World's Fair was crucial, as it marked the country's return as an exhibitor after a break of more than twenty years following the 1937 Paris International Exposition. The choice of Egon Eiermann to design the pavilion represented the continuity of modernism and won international approval. One of Germany's most prominent architects and designers, Eiermann had studied under the first-generation expressionist and modernist Hans Poelzig in Berlin during the 1920s, and was a founding member of the German Design Council in 1951. He was sometimes referred to as the "German Eames" for his experiments in bent-plywood chair construction for the Esslingen company Wilde + Spieth, which ran in parallel with the more celebrated designs from California (plate 273). Eiermann's Brussels pavilion, a structure of black steel and glass, had a simplicity, transparency, and openness that symbolized West Germany's desire to be seen as a "good citizen of Europe." When illuminated at night, it became a showcase for the sculptural forms of a variant of Eiermann's *E10* wickerwork chair (plate 275).[27]

Other landmarks in exhibition design include the West German pavilion at Expo '67 in Montreal, designed by Frei Otto. Along with his contemporary Buckminster Fuller, Otto pioneered tensile and membrane techniques to produce lightweight structures in cable net. He went on to design the much acclaimed roof of the stadium for the 1972 Olympics in Munich. Both structures signaled that German design could embrace the high-tech, the organic, and the futuristic, and break away from the more familiar rectilinear modernist conceptions for which the country had such a deserved reputation.[28]

BELOW
276. Luigi Colani (b. 1928)
***Poly-COR* chair**, 1968
Made by COR Sitzkomfort, Rheda-Wiedenbrück (Germany)
Polyester resin reinforced with fiberglass
Alexander von Vegesack collection

OPPOSITE
277. Helmut Bätzner (1928–2010)
***BA 1171* stackable chair**, 1964–65
Made by Bofinger (Germany)
Polyester resin reinforced with fiberglass
Musée des Arts Décoratifs, Paris

BELOW
278. Walter Gropius (1883–1969)
***Tac 1* teapot**, 1969
Made by Rosenthal Studio Line (Germany)
Black porcelain
Museum für Gestaltung, Zurich

OPPOSITE, TOP
279. Luigi Colani (b. 1928)
Teapot and milk jug from the *Drop* tea service, 1971
Made by Rosenthal Studio Line (Germany)
Porcelain
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

OPPOSITE, BOTTOM
280. Timo Sarpaneva (1926–2006)
***Suomi* service**, 1976
Made by Rosenthal Studio Line (Germany)
Porcelain, stainless steel
Private collection

ART AND DESIGN COLLABORATIONS

The decorative arts have a long and distinguished history in Germany, going back to court manufactories that produced elegant luxury objects with great artistry and skill. Although this emphasis on craftsmanship may seem to sit awkwardly alongside the principles of modern Swiss and German design, with its emphasis on the democratic, the affordable, and the mass-produced, it would be a mistake to regard the two as entirely contradictory.

Among initiatives to combine artistic excellence with modern creativity in the traditional decorative arts, the Rosenthal Studio Line stands out (plate 278).[29] Echoing the Scandinavian tradition of commissioning high-profile designers to develop special product lines, Philip Rosenthal introduced the Studio Line in 1961 to complement his company's reputation for excellence in modern and traditional ceramic services. He went on to work with more than one hundred artists and designers, particularly to encourage new ideas for working in porcelain. To take a case in point, the versatile Swiss-born German designer Luigi Colani was invited to design a tea service for the Rosenthal series in 1973. His *Drop* teapot minimized the profile of the lid and incorporated the handle within the body of the vessel (plate 279). This design allows the pot to be held close to its center of gravity for ease of pouring, and creates a smooth teardrop profile that shares many characteristics with Colani's other product designs, from cars to cameras (plate 276). One of the most acclaimed products of the Studio Line series was the *Suomi* service (1976) by the Finnish designer Timo Sarpaneva, best known for his achievements in glass. For Rosenthal, Sarpaneva developed a teapot, coffeepot, cup, saucer, bowls, and plates in simple, elegant forms (plate 280). In its undecorated version, the *Suomi* service became an

acknowledged classic. Part of its elegance came from the treatment of the lids as integral to the oval composition, and of the chrome steel handle as an extension of the silhouette. The service won the gold medal in the International Ceramic Competition in Faenza in 1976. An eclectic group of artists—including Salvador Dalí, Eduardo Paolozzi, and Victor Vasarely—were also invited to use its open and lidded bowls, teapot, and coffeepot as a blank canvas.[30]

A more recent collaboration between artists, designers, and manufacturer came from the less expected quarter of Swiss watch design. Conventionally associated with centuries of precision engineering, fine metals, and decorative excellence, the Swiss watch industry had, by the early 1980s, been fundamentally challenged by the introduction of inexpensive quartz movements produced outside Europe, and Swiss export figures were plummeting. The founder of Swatch,

BOTTOM
281. Helen von Boch (b. 1939)
***Avant-garde* stackable service**, 1971
Made by Villeroy & Boch (Germany)
Vitroceramic
Musée des Arts Décoratifs, Paris

BELLOW RIGHT
282. ***Falling Star* watches**, 2000
Made by Swatch (Switzerland)

OPPOSITE
283. ***Smart* car**, 1998
Made by Daimler AG
Museum of Modern Art, New York

Nicolas G. Hayek, reconceptualized the Swiss watch and was largely responsible for the revival of this threatened industry after 1983.[31] His introduction of the plastic Swatch watch turned tradition on its head. The product's name cleverly combined the idea of a "Second *watch*" with the national prestige of the "*Swiss*," but Hayek insisted its innovation went beyond a marketing ploy. The Swatch's affordable price, achieved by reducing the number of parts, allowed it to be treated as a changeable fashion statement, something that was particularly attractive to younger people. The close association with Swiss identity was reinforced by the incorporation of the national flag in the branding, realized in a crisp graphic style (plate 282).

The Swatch was available in immediately identifiable, highly designed outlets, including modular kiosks at railway stations and airports, mall shops, and flagship stores in world cities. The appeal of the Swatch was enhanced by associations with modern art. The first artist commissioned to design a Swatch watch was Kiki Picasso, in 1984. He was followed by the hip New York artist Keith Haring, whose four Swatch designs were introduced in the U.S., among them the *Milles Pattes* (Centipede) in 1986. Swatch later extended its purview, commissioning watches from fashion designers, filmmakers, and architects, each chosen for their youth appeal and street cred. The company's associations with fine art continued with its sponsorship of the 2011 and 2013 Venice Biennale. At the same time, Swatch aimed to attract a different type of customer by sponsoring the winter sports of freestyle snowboarding and skiing, as well as the summer sports of basketball and volleyball.

By the early 1990s, Hayek had turned his attention to the automotive industry and again challenged many assumptions about product design and consumer behavior, in this case by reconceptualizing the city car. He established an alliance with Mercedes Daimler-Benz AG in 1994, and the resulting *Smart* car made its debut at the 1998 Paris auto show (plate 283). Following a similar pattern to "Swatch," its name combined the first letters of "Swatch" and "Mercedes" with the word "art."[32] The *Smart* was developed as a rear-engine two-seater in various models, under the direction of designer Johann Tomforde. Taking environmental issues into account, it was intended for ease of city driving and parking. In its mode of manufacture and appearance, the *Smart* had as much in common with other types of industrial products as with conventional automobiles.

BELOW
284. Richard Sapper (b. 1932)
***Tizio* desk lamp**, 1972
Made by Artemide (Italy)
ABS plastic, aluminum
Victoria and Albert Museum, London

OPPOSITE
285. Richard Sapper (b. 1932)
Whistling kettle, 1982
Made by Alessi (Italy)
Stainless steel, polyamide, brass
Centre National des Arts Plastiques/Fonds National d'Art Contemporain, Paris

DESIGN STARS AND DESIGN CULTURE

Many German and Swiss designers have looked south to Milan, sometimes forming partnerships with Italian design groups and manufacturers that have resulted in products with considerable flair and imagination. After studying in Munich, the German industrial designer Richard Sapper joined Gio Ponti's studio in Milan in the late 1950s, and ended up staying in Italy permanently. There he created the iconic *Tizio* lamp (1972), kitchenware for Alessi, and other products that placed him in the front rank of postmodern designers (plates 284, 285).[33]

Another leading personality of German design is Ingo Maurer of Munich. Maurer's fascination with the magical and transformative properties of materials—from humble paper to suggestive gold leaf—leads him to create new illuminated environments. In one of his first designs, the *Bulb* series of 1966 (plate 286), Maurer borrowed the form of the incandescent bulb itself to play on scale and cultural significance. In a manner that echoed contemporary Pop sculptors such as Claes Oldenburg, he used the blow-up to create lighting as sculpture in an expanded field.[34]

A new range of possibilities came with developments in electronics. The LED facilitated Maurer's deconstructive approach, through which he questioned conventional distinctions between cable, container, and light source (plate 288). While constantly developing innovative lighting for the domestic environment, Maurer also works on a theatrical scale, as in his lighting schemes for the Munich subway and his conceptual museum installations.

Konstantin Grcic is one of the most successful German industrial designers of his generation, adapting to the changing requirements of his profession in an increasingly globalized context, with fierce competition from Asian manufacturers in particular. Grcic trained in furniture design at Parnham College in Dorset and the Royal College of Art in London before founding Konstantin Grcic Industrial Design (KGID) in his home city of Munich in 1991. This international design group specializes in lighting, furniture, and product design, working with leading European companies (plate 289).[35]

Grcic's design for the *MYTO* chair, which won international acclaim, represents the key elements of his approach (plate 290). Like many of his designs, it is made from a single material. In this case, Grcic was commissioned by the German chemical company BASF to explore the potential of Ultradur High Speed, a resilient plastic usually used in the automotive industry. The strength of the material led to Grcic's design, a modern

LEFT
286. Ingo Maurer (b. 1932)
***Bulb* lamp**, 1966
Made by Ingo Maurer GmbH (Germany)
Chrome-plated metal, glass
Museum of Modern Art, New York

BELOW
287. Stiletto (aka Frank Schreiner, b. 1959)
***Consumer's Rest* armchair**, 1983
Made by Stiletto Studios (Germany)
Varnished metal, plastic
Vitra Design Museum, Weil am Rhein, Germany

OPPOSITE
288. Ingo Maurer (b. 1932)
***Lucellino* wall lamp**, 1992
Made by Ingo Maurer GmbH (Germany)
Glass, brass, plastic, goose feathers
Museum of Modern Art, New York

variant of the cantilevered chair, which he associated particularly with German modernism of Marcel Breuer and Mies van der Rohe. (Grcic has written that he seeks to address "function in human terms.") No mere technical exercise, the *MYTO* chair bears natural as well as cultural associations: Grcic has commented that "the perforations look quite like an animal skin, and the chair has a reptilian quality with a precise outline and roundish, but tense surfaces. Sometimes animals assume that position when they are ready to pounce."[36]

Another way star designers reach a wider public is through design editing. The German brand Authentics, which belongs to the Flötotto furniture company, publishes an online catalog of affordable high-quality design from its headquarters in Gütersloh. Authentics works with a stable of young, mainly European designers, including Grcic, Sebastian Bergne, Edward Barber and Jay Osgerby, Christina Schäfer, Constantin and Laurene Boym, Shin Azumi, Tord Boontje, and Marti Guixé.[37] In tune with contemporary urban lifestyles, the selection concentrates on apparently quotidian items that are both useful and aesthetically pleasing. Authentics call these objects, which are usually simple and industrially produced, "elementary things." They often transcend conventional boundaries, such as those between living and work space, or inside and outside. With environmental awareness now taken for granted, the Authentics Web site includes a lexicon that describes the properties of the natural and synthetic materials used in its products. One aim is to alter

OPPOSITE
289. Konstantin Grcic (b. 1965)
Chair_ONE, 2003
Made by Magis (Italy)
Painted aluminum, varnished concrete
Musée des Arts Décoratifs, Paris

BELOW
290. Konstantin Grcic (b. 1965)
***MYTO* chairs**, 2008
Made by Plank (Italy)
Made by BASF
Plastic

attitudes—for instance, by promoting colorful and durable plastics as a material of choice for items such as wastebaskets and kitchen and bathroom accessories. The belief is that designers can impact everyday life in deceptively unassuming ways while meeting consumers' expectations.

With a similar ethos, the brothers Daniel and Markus Freitag developed a product that has become part of the iconography of design-conscious cities where physical and creative mobility is key.[38] Living on an arterial road on the outskirts of Zurich, they grew up seeing tractor-trailers on a daily basis. Inspired by this experience, they developed their first shoulder bags in 1993, made from recycled heavy-duty truck tarps and modeled on the American bike courier bag. The tarp is cut by hand, washed in rainwater, and photographed. Only then are design decisions made. The Freitag brothers' concept was enormously appealing to young urban dwellers from Tokyo to New York, and has remained commercially successful, despite being quickly emulated. Their company, Freitag, creates a contemporary street-style mix, with product names referring to the club scene and American popular culture. The bags are seen as environmentally friendly but also perform as strong style statements. A small creative firm, Freitag has retained full control of the design, manufacturing, and marketing of its goods. Its products are available only through the company's own outlets or selected retailers who share a similar outlook. Freitag stores are individually designed according to their location. The shop in Zurich, for example, designed by Annette Spillmann and Harald Echsle in 2006, reflects the brand's recycled, industrial aesthetic, as it is made from seventeen stacked freight containers—ready-mades—held in place by tension members (plate 293). The display system by Colin Schälli uses stackable boxes held together by bungee cords. The shop is located on the edge of the city, away from other designer outlets. The Freitag concept is as thoroughly thought out as any of the earlier corporate design schemes for which German and Swiss companies were so renowned. Only the ingredients, the look, and the ethos differ, equipped as they are for the twenty-first century.

OPPOSITE, TOP
291. Axel Kufus (b. 1958)
***Egal* bookshelves**, 2001
Distributed by Nils Holger Moormann (Germany)
Birch plywood

OPPOSITE, BOTTOM
292. Big-Game (est. 2004)
***Bold* chair**, 2009
Distributed by Moustache (France)
Steel, polyurethane foam, detachable fabric cover

BELOW
293. Bless (est. 1997)
Fatknit Hammock, 2006
Cotton covered with knitted nylon

ITALY

ANTY PANSERA

PRECEDING PAGE
294. Achille Castiglioni (1918–2002) and Pier Giacomo Castiglioni (1913–1968)
***Arco* lamp**, 1962
Made by Flos (Italy)
See plate 343.

OPPOSITE
295. Giacomo Balla (1871–1958)
Coffee set, c. 1929
Made by Atelier Gatti, Faenza (Italy)
Tempera on ceramic

According to one definition, offered in the 1950s by Gillo Dorfles, the preeminent Italian critic and historian of design, the term "industrial design" refers only to cases in which the conception of the object and its production are linked to *aesthetic* values. Such a love for the beautiful seems to be an integral part of the Italian DNA. But the Italians have another innate quality that should not be forgotten: a resourcefulness that allowed them to make something positive from the burdensome restrictions imposed by the peace treaty after World War II and to undertake a program of reconstruction characterized in part by the development and distribution of products made in Italy.

Italian designers have a unique ability to synthesize their traditional artistic culture, the applied arts, and technology. That provides a first clue as to why Italian industrial design has been and continues to be so successful worldwide. Italian designers have always been able to add technical and aesthetic value to a product, and their particular gift for marrying memory and innovation has helped them find ways to breathe new energy into the domestic environment.

THE ROOTS OF ITALIAN DESIGN

It is impossible to speak of industrial design in a country that is not yet industrialized. This process did not take place in Italy until after World War II, although a series of Italian products manufactured by semi-mechanized means had already been displayed in the International Exhibition of Mass Production organized by Giuseppe Pagano at the seventh Triennale di Milano in 1940.

The first artist-designers to focus on utilitarian objects displayed a keen interest in machinery and in nascent industry. These were the Futurists. On March 11, 1915, Giacomo Balla and Fortunato Depero published a first reflection on the relationship between art, craftsmanship, and industry in a manifesto entitled *The Futurist Reconstruction of the Universe*, the official beginning of a long and inventive history. In the first *Futurist Manifesto* (1909), Filippo Tommaso Marinetti had already envisioned the possibility of producing objects in a different way: "It is the solidity of a steel plate in itself that interests us, that is, the incomprehensible and inhuman alliance of its molecules and electrons."

A few years later, Nuove Tendenze (New Trends)—a movement active in Milan from August 1913 to June 1914—brought together painters, artisans, and architects determined to combine pictorial experiments and product design with artisanal practices. One of them was Marcello Nizzoli, who will be discussed later in this chapter, in the context of Olivetti. In designing the shawls, pillows, and handbags produced by his sisters, Nizzoli anticipated the first of the Italian *case d'arte*, the "art houses" that the Italian Futurists opened during the interwar period, from Trentino to Sicily, from Milan (where Cesare Andreoni and Fedele Azari were involved) to Palermo (where Pippo Rizzo was), and also, of course, in Rovereto and Rome. In 1909, Balla had painted a new utilitarian object, the arc lamp, choosing it less for its form than its intrinsic technical value.

In the 1909 *Manifesto,* it is easy to discern (behind the presentiment that human life might someday be governed by the life of the factory) the environment in which Italian industrial design would set down roots. For example, an evident taste for fine craftsmanship marks all the comments about furniture. But the Futurists never sought to develop a mode of production and never designed for industry. Rather, they grasped in aesthetic terms the eminently technological nature

BELOW
296. Fortunato Depero
(1892–1960)
***Ballerina* exhibited at the first Monza biennial**, 1923
Painted wood

OPPOSITE
297. Fortunato Depero
(1892–1960)
Depero Futurista, 1927
Published by Dinamo Azari
Book bound with steel bolts
Private collection

of their age and exalted its speed, its dynamism, its energy. They designed furniture and accessories, but conferred on them the status of art, which makes them not commodities but symbols, feelings (plate 295).

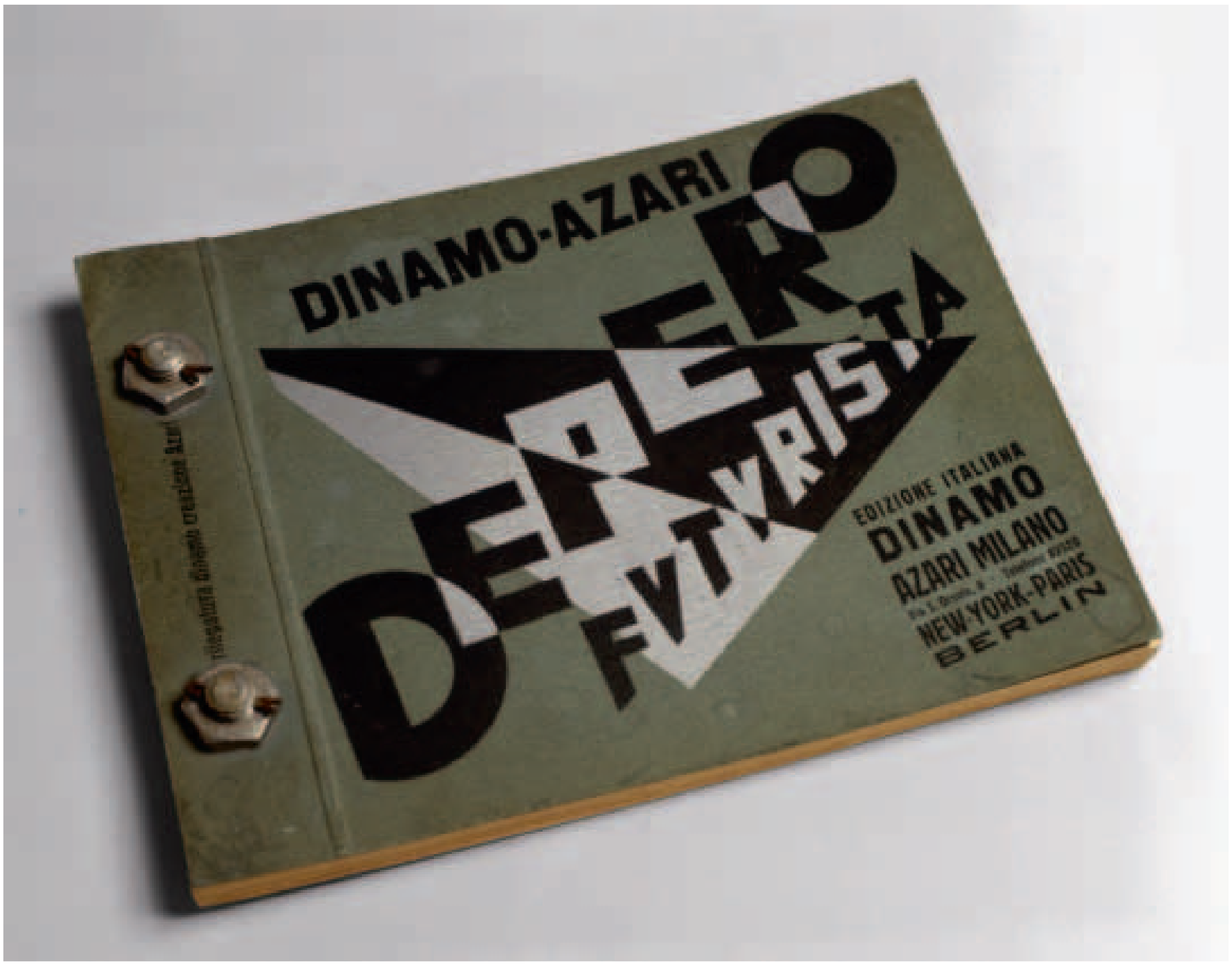
The forms of these objects are deliberately provocative (angular chests of drawers, uncomfortable seats intended for "superfast" use), and the greatest attention is paid to formal and structural solutions. The decorative elements always arise from the very form of the object, which tends to narrate the precise function it is called on to fulfill. The furniture, in bold colors, is generally made of painted wood, completely at odds with bourgeois comfort. The Futurists avoided desks and secretaries, symbols of the academy and of contemplation—and even beds, the burial plots of love. Conversely, they anticipated the use of the sofa bed, the lowboy, the night table, and convertible furniture, multiplying the functions of each element. With the exception of their ceramics, these pieces were one of a kind or produced in limited editions.

Beyond the performances of Marinetti, the Futurists put their stamp on Italian history, especially in the area of furniture. They marked out several essential directions for the future of Italian design, including rationalism and, later on, postmodernism.

THE BIRTH OF AN ITALIAN IDIOM

The predecessor of the Triennale di Milano was the International Exposition of the Decorative Arts,[1] held between 1923 and 1930 at the Villa Reale in Monza. These events, at first taking place every two years, were the birthplace of a specifically Italian idiom, and also offered a unique opportunity to bring Italian creations into dialogue with those of other countries.

The different stylistic grammars of the many regions that constitute the Italian Peninsula—regions attentive to the ideas being developed by their respective European models (London for Sicily, Paris for Piedmont, Vienna for Lombardy and Venetia)—found at the Villa Reale a forum for introducing themselves to the public and, especially, rich soil in which to grow. The historian and theorist Guido Marangoni,[2] who wanted, perhaps, to play the same role in Italy that Hermann Muthesius did in Germany, was the founder and, until 1930, the coordinator of these exhibitions. Even before World War I, he had planned to create an international exposition combined with a school to train designers. That school, the Istituto Superiore Industrie Artistiche (ISIA; Higher Institute for Artistic Industries), opened its doors in 1922 and sought to impose itself as the "Italian Bauhaus." It offered an extremely stimulating work space, thanks to its teaching methods and the renown of its faculty: masters of the decorative arts from Lombardy, such as Alessandro Mazzucotelli, a specialist in Liberty-style wrought iron, and the goldsmith Alfredo Ravasco; artists such as Arturo Martini and Marino Marini; and major figures in the modern movement, such as Giuseppe Pagano, Edoardo Persico, and Marcello Nizzoli. As Gio Ponti remarked, it was a school "where the student and the teacher make and invent



BELOW
298. Francesco Menzio (1899–1979)
Confectioner's shop at the third Monza biennale, 1927

OPPOSITE
299. Luigi Figini (1903–1984), Guido Frette (1901–1984), Adalberto Libera (1903–1963), and Gino Pollini (1903–1991) of Gruppo 7, with Piero Bottoni (1903–1973)
Entrance to the *Electric House* at the fourth Monza exposition, 1930

together." A sort of university campus avant la lettre, it attracted young people from all over Italy, along with a large number of foreign students. Of these first students, we may mention the celebrated "three Sardinians": the graphic designer Giovanni Pintori and the sculptor Costantino Nivola (both of whom eventually work for Olivetti),[3] and the ceramist and sculptor Salvatore Fancello. The ISIA would close its doors for political reasons in 1943, but branches would reopen in the 1970s and '80s, in Venice (briefly), Urbino, Rome, Florence, and Faenza.[4]

The First International Exposition of the Decorative Arts, which opened in May 1923, sought to present the different regional cultures and to begin the search for a specifically Italian style. Its aim was to promote a modernity in tune with the changing spirit of the times and also with regional production capabilities. The local cultures, moreover, were brought face-to-face with fourteen foreign exhibitors, from France, Austria, Hungary, Sweden, and other countries. The exposition addressed the question of how to give shape to everyday life within the domestic environment, by means of the objects that inhabit it.

To be sure, Trentino Hall, designed by Depero and overflowing with artistic objects, elicited the disapproval of critics. They accused Depero of being "only a brass band musician from a country fair." The display by Richard Ginori, the venerable ceramics manufactory that had just been overhauled by Ponti, was a greater success.

Two years later, in 1925, the Monza biennial faced stiff competition from the Exposition Internationale des Arts Décoratifs et Industriels Modernes in Paris. Many exhibitors defected, the Futurists in particular: Balla and Depero opted for Paris. However, Germany chose to exhibit the most significant products of the Deutscher Werkbund at Monza. On the whole, the program for this biennial differed little from that of 1923, although there were a few encouraging signs of vitality: the display, on distinctive mannequins, of silk shawls designed by Nizzoli and embroidered by Piatti of Como; new works by Guido Andloviz, produced in Laveno by the Società Ceramica Italiana (SCI); and the renewed success of the Richard Ginori manufactory.

In 1927, when Ponti became a member of the biennial's arts council, the Novecento movement (as the "return to order" was called in Italy) finally earned its rightful place, being represented by Gio Ponti's and Emilio Lancia's neoclassical furniture. Several artists created stage sets for the biennial, such as a "commercial street" that offered a "very modern slice of city life." Its stylish establishments—a butcher's shop, a bar, a telephone switchboard, a pharmacy, a confectioner's shop (plate 298)—were designed by, among others, the Turinese Gruppo dei Sei (Group of Six), who were gradually approaching the main European current. In the garden of the Villa Reale, Depero created a standalone pavilion for the Bestetti-Tumminelli publishing house, in which the architecture, furniture, and decorative elements were made up of giant three-dimensional letters.

In 1930, the event was renamed the International Triennial Exposition of the Modern Decorative and Industrial Arts, and experimental architecture was again on display in the garden of the Villa Reale. This fourth exhibition, which sought to provide functional and formal solutions to the housing shortage, included three full-size model homes: the *casa del dopolavorista* (workingman's cottage) by Luisa Lovarini—an architect lost to history—as well as Ponti and Lancia's Vacation House and the Electric House by Gruppo 7 (plate 299).

The Vacation House was conceived as a showcase for the Domus Nova line of furniture, which Ponti and

OPPOSITE
300. **Kitchen of the *Electric House* by Gruppo 7 at the fourth Monza exposition**, 1930

LEFT
301. Franco Albini (1905–1977)
Radio, 1938
Receiver and speaker mounted between plates of Securit glass
Single prototype exhibited in the Radio Salon at the seventh Triennale di Milano, 1940

Lancia had designed for the Milanese department store La Rinascente. Intended for the middle classes and offered at very reasonable prices, it could also be purchased by mail: a beautiful catalog featured it under the rubric "modern furnishings." The Edison General Electric Company sponsored the Electric House, designed by Luigi Figini and Gino Pollini to display all the household electrical appliances existing at the time, whether made in Italy or elsewhere. It was filled with functional furniture on the leading edge of domestic comfort, designed by Frette and Libera. Piero Bottoni was responsible for all the kitchen equipment and bathroom fixtures (plate 300). The Electric House served as the manifesto of the rationalists, whose aesthetic would to a great extent characterize the 1930s. It attested to their interest in new materials, particularly metal, and in a closer relationship with industrial production.

At the Triennale of 1930, the Italian productions displayed a certain stylistic unity, set to compete with the transalpine world. On that occasion, Monza also welcomed experiments from foreign schools: the Deutscher Werkbund of Berlin, cofounded by Bruno Paul and the Viennese branch of the Werkbund, run by Josef Hoffmann. Examples of rigorous functionalism were represented as well: the lamps designed by the Bauhaus of Dessau, and Mies van der Rohe's chair in chrome-plated tubular steel. France sent extraordinary pieces in the 1925 style, as well as the beautiful travel accessories of Louis Vuitton.

At the time, given the success of the event and the difficulties of drawing in people from the Milanese hinterland, there was talk of transferring the Triennale to Milan. The idea even arose (already!) of constructing a light-rail system. Three years later, a building designed by Giovanni Muzio to house the Triennale was unveiled in Parco Sempione, in the very heart of Milan: the Palazzo dell'Arte. This versatile building, illuminated by natural light, already housed various services: a post office, a fire station, a library, a theater, a bar, and a restaurant attached to the garden terrace on the roof. Next to the Palazzo dell'Arte, and in sharp contrast to its Novecento style, Gio Ponti and Cesare Chiudi erected their Torre Littoria, or "Fascist Tower," made entirely of Dalmine steel pipes.

At that Fifth International Exposition of the Modern Decorative and Industrial Arts and of Modern Architecture (architecture now being an integral part of the theme), the concept of industrialization was already integrated into the furniture designs on display (plate 302). These all paid great attention to new materials, such as linoleum and its derivatives, boxwood, Anticorodal (a 98-percent aluminum alloy), and steel—to which an entire pavilion, the Steel-frame House in Parco Sempione, was devoted—as well as metal tubing, which the Columbus company bent into chairs, tables, and desks.[5] These prototypes were analyzed by critics from the specialist magazines but would ultimately have only a modest commercial success, being used primarily in public and collective spaces and in the Italian overseas colonies.

302. Franco Albini (1905–1977), Renato Camus (1891–1971), Paolo Masera, and Giancarlo Palanti (1905–1977)
Sitting room and office on two floors, at the fifth Triennale di Milano, 1933

In accordance with Ponti's principle of the "unity of the arts," painting was also represented, in the form of monumental murals by Mario Sironi, Massimo Campigli, Achille Funi, Giorgio de Chirico, and Gino Severini. Among the many structures erected in the park was a Futurist terminal for a civilian airport, designed by Enrico Prampolini with the collaboration of several "aeropainters" (Andreoni, Depero, Munari).

The Sixth Triennale, whose tone of moral responsibility can be attributed to Pagano and Persico, took place in 1936. It sought to promote "an intimate and profound embrace of life by the arts," as Pagano wrote. He was eager to make the Triennale a hub of activities, constructive debate, and permanent research, and for that reason sought to establish a study center there.

Despite the general climate of autarky reigning in Fascist Italy in the years prior to World War II, the Palazzo dell'Arte was open to experiments from outside the country, which would have a significant impact on the culture of Italian design. Max Bill, for example, designed the Swiss pavilion, and Alvar Aalto's work sparked the interest of many designers. But the essence of the Sixth Triennale lay in the Salone della Vittoria (Victory Salon), a collaborative effort by Persico, Palanti, Nizzoli, and Lucio Fontana, who created a successful synthesis of architecture and the visual arts, marked by a creativity linked directly to the rationalist experiment. This monumental project was envisioned as an "act of faith in the greatness of pacified Europe," but it was partly mutilated by state censorship, just as the Triennale was deprived of the presence of Gropius and other German architects.

The Seventh Triennale of Milan, in April 1940, included the International Salon of Mass Production, organized by Pagano with the aim of "helping to think form as it is thought by the collectivity." In many respects, this salon marked the transition from mechanized craftsmanship, characteristic of "protodesign," to industrial production. On display were the very first Italian products that openly took the industrial process into account as a methodological model for design; these items were manufactured by some of the largest Italian companies (Fiat, Olivetti, Pirelli). The theme of the salon was "standardization"—a subject of debate in Europe since the beginning of the century but still unknown in Italy. For the rationalists, standardization gave concrete form to the principles of quality and social utility, a choice more ethical and pedagogical than productive or economic.

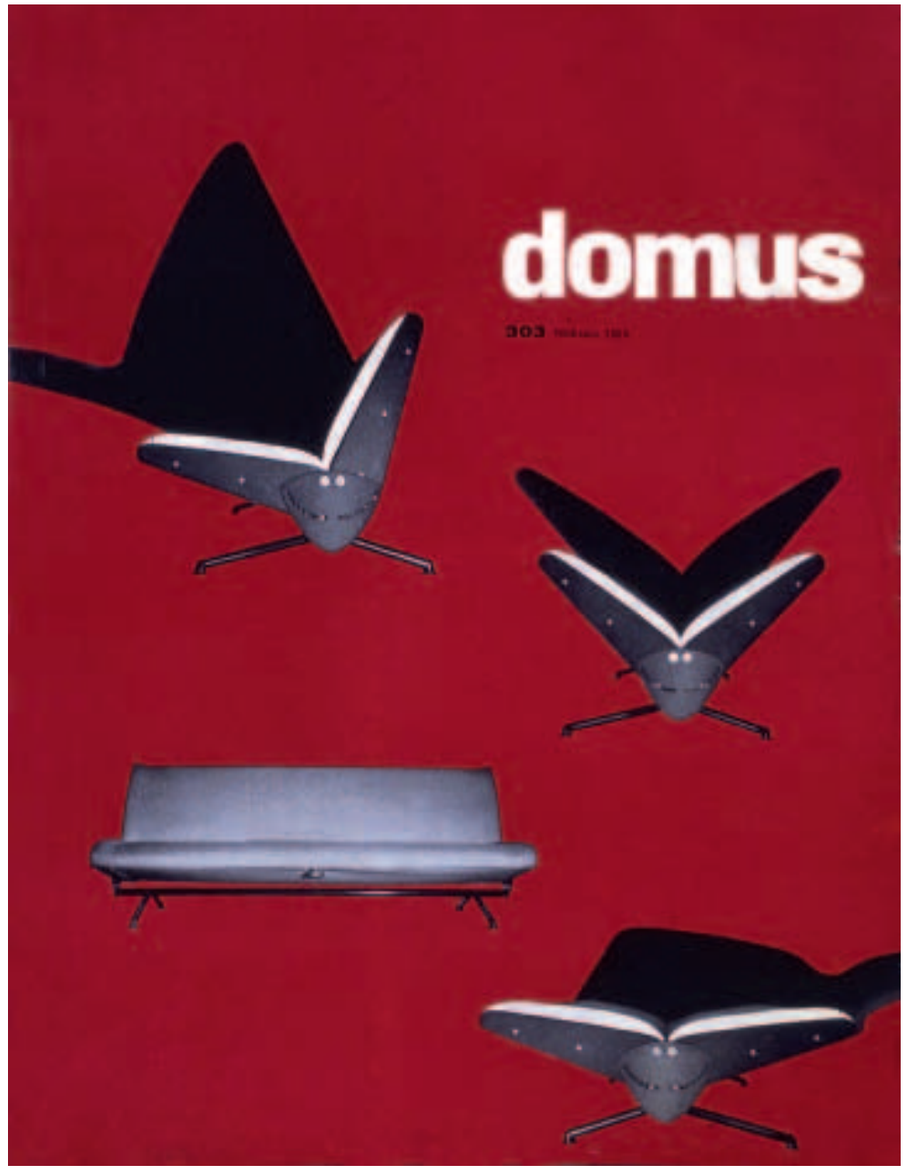
At the same Triennale, Livio and Pier Giacomo Castiglioni made their debuts (as did Luigi Caccia Dominioni) as commissioners of the Radio Salon. About twenty receivers were collected there, each displaying an alternative solution to the traditional radio set concealed in a chest or cabinet. (In 1938, Franco Albini had already exposed the radio receiver and speaker between two plates of Securit glass; plate 301). Office furniture also played a prominent role. The trend was toward efficiency: everything had to be within reach—tools as well as work surfaces—and the materials were to be metallic, lightweight, and strong. Several models of telephone were exhibited, as well as many typewriters that Nizzoli had designed for Olivetti.

The year 1940 was indeed an emblematic one for Italian design. However, as we will see, the birth of a real notion of industrial design[6] and of the figure of the designer—someone who creates prototypes that industry produces on a large scale and by mechanical means—dates to the beginning of the 1950s.

303. Cover of the review ***Domus*, founded by Gio Ponti**, No. 303, February 1955

OPPOSITE, TOP
304. Gio Ponti (1891–1979) ***Superleggera* chair**, 1957
Made by Cassina (Italy)
Lacquered ashwood, cane seat
Musée des Arts Décoratifs, Paris

OPPOSITE, BOTTOM
305. **Demonstration of the lightness of Gio Ponti's *Superleggera* chair**



THE AGE OF PIONEERS

The Futurists certainly played a role in the very early days of design, but it was primarily the rationalists who set the stage in the 1930s. The pronouncements of Gruppo 7 (formed in 1926 by the architects S. Larco, G. Frette, C. E. Rava, L. Figini, G. Pollini, G. Terragni, and A. Libra) on the need for a "strict respect for logic and rationality" originally referred only to architecture, but they were quickly applied to furniture and other objects as well. In the words of the critic Edoardo Persico, design was a means for moving "beyond architecture."

It was primarily architects and engineers, in fact, who were advancing toward an integral conception of the home environment. Along with a handful of artists and craftsmen, also attentive to technological developments, they were the pioneers of "protodesign," a neologism that is still useful for defining the relationship that was gradually established between art and industry, design and product. They were able to provide new answers in the area of production but also a poetics: in other words, a new language.

Foremost among them was the Milanese Gio Ponti (1891–1979),[7] a multitalented architect and eclectic creator of forms, ranging from the small curio to the urban plan, who set to work in the early 1920s. It should not be forgotten that he also played an important role in kindling industry's passion for art, by means of the now-legendary review *Domus,* founded in 1928 (plate 303), and a lesser-known magazine, *Stile* (1941–47), intended to assemble everything related to "expression, ornament, or instrument in our lives and beautiful homes." *Stile* also published "free projects," such as Carlo Mollino's furniture patterns. "Industry," said Ponti, "is the style of the twentieth century, its way of creating a relationship between art and industry: art is the species; industry, the condition."

The Novecento movement and its aesthetic, then rationalism, shaped Ponti's idiom. He could be called eclectic, although the synthesis of the different arts was always the guiding thread of his poetics, and his work was always directed toward "the original purity of the relationship between form and function." His first experiment consisted of modernizing—with a touch of classicism and of solemnity mixed with irony—the ceramics of the eighteenth-century Richard Ginori manufactory (plate 306). This was followed, also in the 1920s, by the creation of the Domus Nova furniture collection, with its very clean lines, for the department store La Rinascente (1928). The previous year, he had founded Il Labirinto, which offered objects and furniture to a more refined, bourgeois clientele, and in the early 1930s he established Fontana Arte[8] to produce lamps and glass furniture.

Ponti also made a fundamental contribution to furniture manufacturing after World War II. For Cassina,

RIGHT
306. Gio Ponti (1891–1979)
***La Passeggiata Archeologica* urn**, 1925
Made by Richard Ginori (Italy)
Enameled porcelain
Metropolitan Museum of Art, New York

BELOW
307. **Interior of the Parco dei Principi Hotel in Sorrento, designed by Gio Ponti, with furniture from Arnestad Bruk (produced by Cassina)**, 1962

OPPOSITE
308. Gio Ponti (1891–1979)
***Morandiana* bottles**, c. 1950
Made by Venini (Italy)
Hand-blown glass, glass rods

BELOW
309. Bruno Munari (1907–1998) and Enzo Mari (b. 1932)
***Diamante* espresso machine**, 1956
Made by La Pavoni (Italy)

OPPOSITE, TOP
310. Marcello Nizzoli (1887–1969)
***Mirella* sewing machine**, 1957
Made by Necchi (Italy)
Museum of Modern Art, New York

OPPOSITE, BOTTOM
311. Marco Zanuso (1916–2001)
***1100/2* sewing machine**, 1956
Made by Veglia Borletti (Italy)

he designed the famous *Superleggera* chair (1957), still produced today, which revisited the Chiavarina (or Campanina) chair, a pure product of artisanal cabinetmaking (plates 304, 305), developed in Chiavari (Liguria) in the early nineteenth century. The *Superleggera* was characterized by the lightness of its ashwood frame (3.75 pounds, or 1.7 kg) and the translucency of its seat in woven India cane. Chairs, a veritable playground for designers but also a showcase for furniture makers, tell their own story of Italian design. The infinite variety of the solutions imagined is a constant source of surprise.

Ponti also designed for other manufacturers, who sought him out precisely because he was an ardent defender of "industry, the style of the twentieth century" and the "hub of our social organization." He designed sewing machines, for example, such as the *Visetta* of 1948. In the following decade, a number of other designers would reinterpret this essential household appliance, and two would win the Compasso d'Oro for their efforts: Marco Zanuso for the *1100/2*, made by Borletti in 1956 (plate 311); and Nizzoli for the *Mirella,* produced by Necchi in 1957 (plate 310). Ponti also created coffee machines for bars: in 1949, he designed a horizontal model for La Pavoni, with each functional component clearly delineated; and in 1956, through *Domus*, he sponsored a competition to design such a machine, which was won by Bruno Munari and Enzo Mari's *Diamante* model (plate 309). He produced lights and bathroom fixtures that favored physiological rather than geometric forms (especially the range of products distributed by Ideal Standard).

Typically "Pontian" designs include the "wall organizer" (1949), the "headboard-dashboard" (1953), the "furnished window" (1954), and the "domestic cell," a kind of flexible housing called *alloggio uniambientale* in Italian. In the 1950s, when Italy converted the vessels requisitioned for the war back to civilian use, Ponti designed a large number of amenities for cruise ships. He was also responsible for the famous Pirelli Tower (1956), a skyscraper designed in collaboration with Antonio Fornaroli and Alberto Rosselli, which for years was a symbol of modern Milan.

Through *Domus*, Ponti contributed significantly to the renewal of Italian production. For several decades, the review, which initially targeted a broad audience of enlightened amateurs, promoted a new domestic environment. Ponti played an equally decisive role in establishing the Compasso d'Oro prize and the Associazione per il Disegno Industriale (ADI).

In 1928, another magazine made its debut: *La Casa Bella*, founded by Guido Marangoni. Later named *Casabella*, it would undergo profound changes over the years. From 1933 on, it was edited by Pagano,[9] an architect, designer, and theorist active in the field of industrial design, who worked with Ponti on railroad car compartments for the Breda company.

In fact, the first companies in Italy to commission "modern" products from artists and architects included not only ceramics and glass factories, but also aircraft and automobile manufacturers: they wanted "designer-engineers." As Giovanni K. Koenig has shown, the Italians were "widely recognized as the best in the world" at aeronautical design.[10] (It must be said that this new industry was supported by Fascism.) One important aircraft manufacturer was Caproni, founded by the engineer Giovanni Caproni in 1910, the year after the first major Italian aeronautical exhibition in Milan. All Caproni planes had a distinctive, functional, and very elegant architecture, and the company enlisted the design services of Cesare Pallavicino[11] (beginning in 1933)


BORLETTI

BELOW
312. Marcello Dudovich (1878–1962)
Poster for the Fiat *508 Balilla*, 1934

OPPOSITE, TOP
313. **Advertisement for the launch of the new *Fiat 500***, 1957

OPPOSITE, BOTTOM
314–15. Pinin Farina (1893–1966), with Piero Dusio (1899–1975), Giovanni Savonuzzi (1911–1987), and Dante Giocosa (1905–1996)
Cisitalia *202 GT*, 1946–48
Made by Pininfarina (Italy)
Museum of Modern Art, New York

and Secondo Campini, who would design the first Italian jet in 1940. By 1917, the Breda company had also constructed large hangars outside Milan, at Sesto San Giovanni and Bresso, where it produced civilian and military aircraft. Filippo Zappata, having returned to Italy after a productive experience at Blériot Aéronautique, designed the four-engined Breda *BZ308*, which was completed in 1948. In addition to being on the cutting edge of technology, the *BZ308* was characterized by its extraordinary aesthetic quality, the result of a harmonious synthesis between design, construction technique, and aerodynamic research.

Since its inception at the beginning of the twentieth century, the Italian auto industry has succeeded in combining artisanal traditions, entrepreneurial know-how, and creativity to close the technological gap that once separated Italy from more industrialized nations.[12] The city of Turin in particular has become synonymous with automotive design. It was there, in 1899, that Giovanni Agnelli founded Fiat (Fabbrica Italiana Automobili Torino). The mass motorization of Italy began with the Fiat *508 Balilla*, exhibited at the Milan Trade Fair in 1932 (plate 312). Among its designers was the engineer Dante Giacosa,[13] who, from 1929, dedicated himself to Fiat's small cars: the *Topolino* in 1936, followed, after World War II, by the *600* (1955–56) and the *Nuovo 500* (1957), "the Italian's first car," destined to replace the bicycle and the motor scooter (plate 313).

Also exercising his talents in the Piedmont capital was Giovanni Battista Farina, nicknamed "Pinin Farina." After on-the-job training, a visit to Detroit in 1920 (where he was welcomed by Henry Ford), and various successes as a racer, he opened the Carrozzeria Pinin Farina in 1930. Even before 1939, he had begun to develop the revolutionary forms that would culminate, after the war, in the Cisitalia *202* (plates 314, 315). With this little coupé, he established a new style in which the volumetric shape of the car body was no longer merely the result of assembling two-dimensional panels. As we will see below, the Pininfarina company went on to create many other influential designs for Italian and foreign carmakers.

Lombardy would also make its contribution to the history of automobile design, with Isotta Fraschini (1900) and, especially, Alfa Romeo. The arrival of the engineer Nicola Romeo in 1915 increased the dynamism of the cars produced by Alfa (Anonima Lombarda Fabbrica Automobili, founded in 1910). And so began the heyday of the red Alfa Romeo race cars with engines by Vittorio Jano. Enzo Ferrari founded his Scuderia Ferrari racing team in 1929, at first using Alfa Romeos but eventually developing his own racers, starting with the *125 S* of 1947.

The studio BBPR was formed in 1932 by Gian Luigi Banfi, Ludovico Barbianao di Belgiojoso, Enrico Peressutti, and Ernesto Nathan Rogers. These architects—urbanists above all—were not averse to working on small-scale projects and organized the *Form of the Useful* exhibition at the Ninth Triennale. Other architect-designers included Giulio Minoletti, who was responsible for the emblematic Italian luxury train, the


la nouvelle
FIAT
la nuova
500
the new

BELOW
316. Carlo Felice Bianchi Anderloni (1916–2003)
Ferrari *166 MM Touring Barchetta*, 1948–53

OPPOSITE, TOP
317. **Franco Albini behind his *Veliero* bookcase**, 1938, manufactured originally by Poggi and now by Cassina

OPPOSITE, BOTTOM
318. Franco Albini (1905–1977)
***LB7* bookcase**, 1957
Made by Poggi (Italy)
Rosewood, lacquered aluminum
Private collection

Settebello electric for Breda (1949); and Franco Albini,[14] who opened his studio in 1930 and, while giving precedence to architecture, was already participating in the Triennales at that time. The bookcase with a guy-rope structure that Albini produced in a single prototype for his home on via De Togni in Milan (1938), and which now appears in Cassina's *I Maestri* catalog, is a veritable manifesto (plate 317). Its glass shelves, suspended by steel cables and ashwood masts, recall the yards and sails of a boat. (The bookcase is in fact called *Veliero*, or "Sailboat.") Albini pursued his work in the 1950s with the same coherence and in the same rationalist vein, although his personal poetics led him to take a greater interest in means of construction, technological innovations, and the relationship between materials of various forms and colors. Three of his creations may serve as examples: the small *Luisa* chair (1950), the *Fiorenza* chair (1955), and the *LB7* bookcase (1957; plate 318), which defined the image of the Poggi firm in Pavia.

As of 1951, Albini was assisted by Franca Helg, perhaps the first woman to work in the field in Italy.[15] For her, "design is constant experimentation" that requires "patient research" and is characterized by a concern for line and detail. She would take on a wide variety of projects, from television sets (the *Orion* for Brionvega, 1963) to lighting (for Sirrah, 1968) to furniture (for Poggi and Bonacina, although it is difficult to distinguish her contribution from Albini's) to dishware (for San Lorenzo in 1971, plate 321; and Richard Ginori in 1986). In 1963, Albini and Helg, along with Bob Noorda, set to work on the visual identity of Milan's first metro line, a project that would win them the Compasso d'Oro the next year. Their guiding principle in this undertaking was modularity, allowing for almost infinite expansion, as would later be demonstrated by Metro Line 2.

Also part of that generation of architects was the Venetian Carlo Scarpa,[16] who often worked with Venini on the design of very delicate glass objects (plate 322). Influenced by the work of the pioneer of organic architecture, Frank Lloyd Wright, Scarpa took a rather classical approach. In the 1960s, with the collaboration of Dino Gavina, he created a heterogeneous series of fine furniture for Simon International, including the *Doge* table (1968), and various light fixtures for Flos.

Finally, there was Carlo Mollino, the enfant terrible of architecture and design.[17] Mollino, from a family of artists, graduated from the University of Turin in 1931. An ingenious dabbler, he was interested in

photography, set design, aeronautical engineering, and furniture, as well as automobile racing. He created two race cars, the *Osca 1100* (1954) and the DaMolNar *Bisiluro* ("Double Torpedo"; 1955). Most of his projects remained at the prototype stage or were produced on a very small scale (although they would be reissued in the 1970s). His eclectic and highly imaginative idiom transformed tables, chairs, sofas, and mirrors by evoking the animal world or the human body (the female body in particular); in his surrealist universe, the familiar was rendered unique (plates 319, 320). His influences included Antoni Gaudí, as well as Charles Rennie Mackintosh, Charles and Ray Eames, Le Corbusier, and Alvar Aalto.

By contrast, two figures in the history of Italian design had their roots in Futurism: Marcello Nizzoli,[18] a painter by training, and Bruno Munari,[19] also an artist-designer. They may be considered the first prominent nonarchitect designers in Italy.

For them, Futurism was a method of design attuned to the needs of their contemporaries. This is attested by the objects they produced, which are always marked by a kind of minimalism: they possess an essential form, to quote Munari, that "emerges naturally from the nature of the service they offer."

Nizzoli very quickly moved toward abstraction, a prelude to his days among the ranks of the rationalists. His 1931 encounter in Milan with the Neapolitan Edoardo Persico was a determining factor. With Persico, a critic and historian of art and architecture, and coeditor of *Casabella*, Nizzoli designed the physical layout for several stores. Although he received his first commission as a graphic designer for Campari billboards, his name is almost synonymous with Olivetti. The latter firm had been founded by Camillo Olivetti in Ivrea (Piedmont) in 1908 to produce calculators and typewriters. Thanks to Adriano Olivetti (1901–1960), who succeeded his father in 1929, the company distinguished itself with a business culture focused equally on fine modern products and on the working environment. It therefore turned to designers for innovative graphic design, public relations, and product design (plates 323, 324). (In that field, the painter Alberto Magnelli's role in creating the *MP1*, Olivetti's first portable typewriter, in 1932 is significant.) But the firm also encouraged them to imagine a sort of ideal city, where employee housing and factory buildings would be harmoniously integrated into the urban space.

Nizzoli was enlisted to work in Olivetti's publicity department in 1935, and he went on to serve as product

OPPOSITE
319. Carlo Mollino (1905–1973)
***Arabesco* table**, 1950
Distributed by Apelli e Varesio (Italy)
Maple plywood, glass, brass
Musée des Beaux-Arts, Montreal

BELOW
320. **Interior of a house designed by Carlo Mollino in Turin**, c. 1950

OVERLEAF
321. Franca Helg (1929–1989)
***Pannocchia* and *Spirale* bowls**, 1971
Distributed by San Lorenzo (Italy)
Silver

PAGE 269
322. Carlo Scarpa (1906–1978)
Vases, 1940
Made by Venini (Italy)
Glass
Private collection

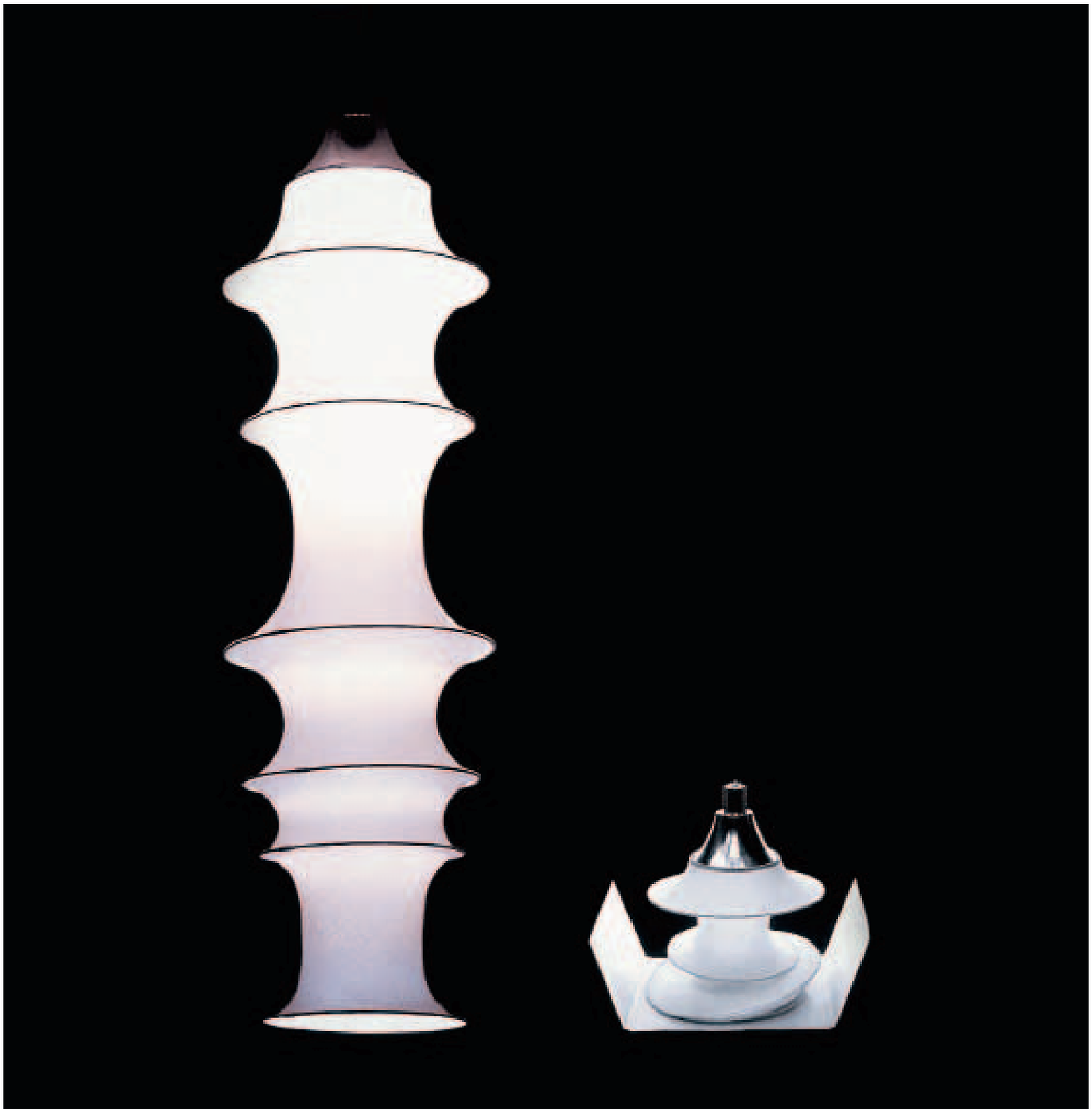
LEFT
323. Ettore Sottsass (1917–2007)
***Valentine* portable typewriter**, 1969
Made by Olivetti (Italy)
Museum of Modern Art, New York

BELOW
324. **Advertisement for the Olivetti *Valentine* portable typewriter by Ettore Sottsass**, 1969
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

OPPOSITE
325. **Advertisement for the Olivetti *Lettera* 22 portable typewriter by Marcello Nizzoli**, 1950
Museum of Modern Art, New York

manager at the firm until 1960. He has to his credit several typewriters: the *MC Summa 40* (1940); the *Lexicon 80* (1948), "one of the first examples of an object whose sleek casing was not designed as a mere cosmetic envelope but the result of a careful correspondence to the internal structure of the mechanism it protected," according to Gillo Dorfles; and the *Lettera 22* (1950), the portable typewriter par excellence (plate 325).

As for Munari, he was not only a designer and painter but also a sculptor, an illustrator, a graphic artist, and a pedagogue at heart. He took a real interest in the eventual owners of his objects. Behind his "useless machines," his "aerosculptures" of 1933, there is almost always an implicit message for the user: "You try, too!" He was also interested in children, for whom he published an innovative series of books beginning in 1945. Munari was one of the founders of the Movimento per l'Arte Concreta (MAC; Concrete Art Movement)[20] and in 1952 launched his first products: two foam-rubber toys, the cat *Meo* and the little monkey *Zizi* (winners of the first Compasso d'Oro in 1954).[21] He would also design for Danese,[22] which was founded in the mid-1950s by Bruno Danese and Jacqueline Vodoz to produce everyday objects for the home and office and later specialized in the promotion of educational games. Danese's products, designed by Munari as well as Enzo Mari, were distinguished by a forthright functionalism and an immediately recognizable look (plates 327, 328). Munari's designs for the firm include the famous *Cubo* ashtray of 1957 (plate 326) and a series of lamps in geometric shapes, for which he also designed the packaging; notable among these is the *Falkland* pendant lamp of 1964, with a long elastic mesh that covers metal rings of varying diameters, giving the piece a pronounced verticality (hence its nickname *Calza*, or "Stocking"; plate 329). For the firm Robots, Munari designed a structure that combines a child's bed and a play environment: the *Abitacolo* of 1970, awarded the Compasso d'Oro in 1979.



OPPOSITE, TOP
326. Bruno Munari
(1907–1998)
***Cubo* ashtray**, 1957
Made by Danese (Italy)
Anodized aluminum,
melamine
Museum of Modern Art,
New York

OPPOSITE, BOTTOM
327–28. Enzo Mari (b. 1932)
***Timor* perpetual calendar**,
1966
Made by Danese (Italy)
Plastic
Museum of Modern Art,
New York

ABOVE
329. Bruno Munari
(1907–1998)
***Falkland* pendant lamp**, 1964
Made by Danese (Italy)
Jersey, aluminum
Centre National des Arts
Plastiques/Fonds National
d'Art Contemporain, Paris

OPPOSITE, TOP
330. Corradino d'Ascanio (1891–1981)
***Vespa GS 150* scooter**, 1955
Made by Piaggio (Italy)
Museum of Modern Art, New York

OPPOSITE, BOTTOM
331. **Advertisement for *Vespa* scooters**, 1960

BELOW
332. Cesare Pallavicino and Pierluigi Torre (1902–1989)
***Lambretta* scotter**, 1949–50
Made by Innocenti (Italy)

THE POSTWAR ERA: NEW VENTURES

The reconstruction of Italy began on April 25, 1945, in the liberated city of Milan. It was marked by the express desire to get the country back on its feet as soon as possible. The capital of Lombardy had lost many of its houses: more than 50 percent of the buildings had been destroyed or seriously damaged. The Galleria Vittorio Emanuele was eviscerated, the Teatro alla Scala no longer had a roof, and the Pinacoteca de Brera was collapsing under rubble.

Very quickly, the architects formed a loose association, the Movimento Studi per l'Architettura (MSA), to continue the work of the rationalists. After the war, then, it was rationalism, in parallel with the radical restructuring of industry, that would profoundly mark Italian design.

It was natural that 1947 should be the year of the "Reconstruction Triennale." That Eighth Triennale, organized by Piero Bottoni, set out the themes that would provide the guiding thread for subsequent Triennales: urbanism, social architecture, and products and furniture designed for the working- and middle-class homes being built in the suburbs. The Triennale's Housing Salon therefore gave preeminence to the questions of uniformity and standardization, while basic furniture made with inexpensive materials and the relationship between form and function held a prominent place at the *Objects for the Home* exhibition. After the event, one concrete object would remain: the experimental QT8 (Quartiere Triennale Ottava), a neighborhood designed and built on the outskirts of Milan to demonstrate the feasibility of low-cost construction. This may be the only Italian example of the synthesis of the arts advocated by Le Corbusier.

The attention granted to the synthesis of the arts and to an interdisciplinary approach was just as essential for the architects, designers, and artists who formed the Movimento per l'Arte Concreta in December 1948. Its founders included Dorfles and Munari, soon joined by Vittoriano Viganò and other architects, the industrial designer Joe Colombo, graphic designers (Giancarlo Iliprandi, for example), and various artists (notably, the abstract painter Luigi Veronesi).

After the war, industry converted back to civilian production as efficiently as possible. Piaggo and Innocenti began to produce motor scooters that repurposed the now-obsolete components of the aeronautics industry. The *Vespa* (1946–47) was produced in the factories of Pontedera in Tuscany (plate 330). Its name, of course, refers to the lightness of the wasp (*vespa* in

BELOW
333. Marco Zanuso (1916–2001)
***Lady* chair**, 1951
Made by Arflex (Italy)
Metal, latex foam, fabric
Museum of Modern Art, New York

OPPOSITE
334. Marco Zanuso (1916–2001)
***Sleep-O-Matic* convertible sofa**, 1954
Made by Arflex (Italy)
Steel, latex foam, fabric
Private collection

Italian) but is also derived from the acronym VESPA (Veicoli Economici Società per Azioni; Economical Vehicles Joint Stock Company).

The *Vespa* was soon joined by the *Lambretta* (1949–50), built in Milan on the banks of the Lambro River (plate 332).[23] Both scooters were designed by aeronautical engineers: the *Vespa* by Corradino d'Ascanio (who had developed a helicopter prototype in 1930); the *Lambretta*, with a tubular frame, by Cesare Pallavicino and Pierluigi Torre. These models not only enhanced the design of motor scooters but also revolutionized transportation, becoming the symbol of a newly motorized Italy (plate 331).

In the area of furniture, Pirelli[24] began to experiment at this time with elastic fabrics and foam rubber, a material that had been invented to protect airplane fuel tanks from shell fragments.[25] A handful of young entrepreneurs who had been involved with these experiments founded Arflex (1950), a firm that immediately attracted talented designers. Its mass production of chairs helped to supplant traditional furniture making and create a new kind of home environment. For Arflex, the architect Marco Zanuso created the famous *Lady* chair, lightweight and with soft curved lines (1951; plate 333) and the *Sleep-O-Matic*, a sofa that converts into a bed (1954; plate 334). Older, more established designers also collaborated with Arflex, such as Franco Albini and the members of the BBPR group. Over time, Giancarlo De Carlo, Tito Agnoli, Pierluigi Spadolini, Joe Colombo, and Cini Boeri[26]—one of the first Italian women to design houses and consumer products—would work for the agency. Boeri started out as a designer and architect alongside Ponti and Zanuso, her teacher at the Politecnico di Milano. She also created some original furniture, such as the *Serpentone* ("Big Snake," 1971), an infinitely expandable sofa made up of soft polyurethane rings (plate 335); and the *Strips* series of modular sofas (in collaboration with Laura Griziotti), which received the Compasso d'Oro in 1979 (plate 337). Her *Ghost* chair, designed with Tomu Katayanagi for Fiam in 1987, was a great success (plate 336).

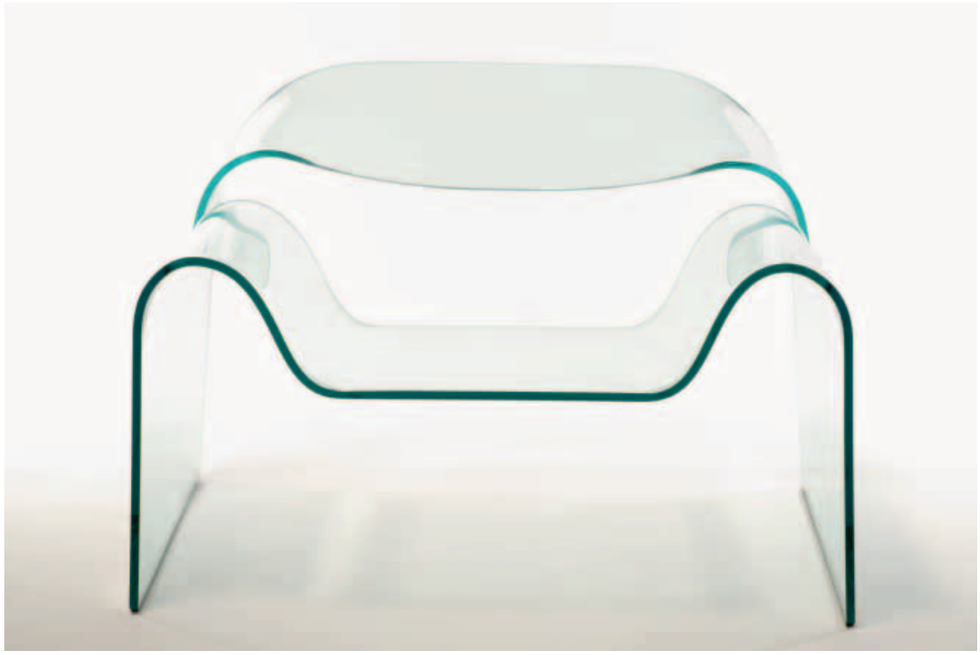
Aurelio Zanotta also entered the world of furniture and accessories in 1954, founding a company that would encourage many designers to experiment with new materials, such as steel tubing and polymers like Perspex and Plexiglas. Meanwhile, Marco Zanuso[27] managed to combine crystal and steel in his *Marcuso* pedestal table (1969). Zanuso also designed an interesting fully equipped kitchen for the newly created Elam company in 1966, along with all sorts of other appliances, from television sets to sewing machines to lamps, over the years. But perhaps his greatest achievement was to theorize the dignity of design, of small-scale projects versus large-scale architecture, although he continued to play a leading role in the latter field, and not only in Italy.

Another company that would become a key player in Italian design and manufacturing got its start at this time: Kartell,[28] founded in 1949 by Giulio Castelli, an

ABOVE
335. **Transporting the *Serpetone* sofa, designed by Cini Boeri and distributed by Arflex (Italy)**, 1971

OPPOSITE, TOP
336. Cini Boeri (b. 1924) and Tomu Katayanagi (b. 1950)
***Ghost* chair**, 1987
Made by Fiam (Italy)
Glass
Musée des Arts Décoratifs, Paris

OPPOSITE, BOTTOM
337. Cini Boeri (b. 1924)
***Strips* bed**, 1972
Made by Arflex (Italy)
Wood frame, polyurethane foam, heat-sensitive polyester fiber, velvet



engineer and a student of Giulio Natta at the Politecnico di Milano. Natta had long been researching polymers with the support of the Montecatini company, and in 1963 he would receive the Nobel Prize in chemistry for his work on this subject. Castelli was thus aware of the potential of the new materials and technologies, but he also heeded the suggestions of several architects, including Anna Ferrieri, who would become his wife. Numerous designers worked for Kartell, on the most varied projects. They renewed the home environment with small, inexpensive, and ingenious accessories that replaced the traditional tin buckets, aluminum sieves, glass lemon presses, and rattan carpet beaters. Thanks to plastics, they could offer these items in novel and harmonious shapes and explosive colors. Roberto Menghi designed receptacles, watering cans, and jerry cans (plate 339) with curved lines, rounded corners, and ergonomic handles, as well as various car accessories (such as the innovative *Portasky* ski rack, with Carlo Barassi). Gino Colombini's reimagined household goods stand out for their unusual colors (plate 338), while the Castiglioni brothers created light fixtures of a new kind. Traditional items of furniture such as chairs were also rethought: for example, the *4999*, an all-plastic chair for children, designed by Zanuso in 1964 (with Richard Sapper); and Joe Colombo's *Universale* chair (1965–67), made of ABS, with curved lines and streamlined surfaces, the first full-size chair molded entirely from plastic (plate 340). Anna Castelli Ferrieri[29] also created original pieces, such as the *4905/7* stackable tables, the *Componibili* system of square and round storage modules (1967; plate 341), and the *4830* series of stools (1979). All these families of multiuse products, cheerful and colorful objects with a rigorous style and a low selling price, breathed new life into the domestic setting. Everything was extremely functional—not only the design and form of each product, but also its mass production once the mold was made.

Azucena had a very different project in mind. This small business was founded in 1947 by three architects—Ignazio Gardella, Luigi Caccia Dominioni, and Corrado Corradi dell'Acqua—to produce limited editions of furniture and interior decor that they designed with an eye toward historicism. These objects, which could be used in different contexts, were not intended for a large public. Dominioni, for example, created the *Catilina* chair (1958) as well as the *Franz Joseph* bed (whose very name spoke volumes).

Ernesto Gismondi ventured (initially with Sergio Mazza) into the world of lighting: his company Artemide began the mass production of light fixtures in

OPPOSITE, TOP
338. Gino Colombini (b. 1915)
Dustpan, 1957
Made by Kartell (Italy)
Polystyrene
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

OPPOSITE, MIDDLE LEFT
339. Roberto Menghi (1920–2006)
Jerry can, 1958
Made by Pirelli (Italy)
Polyethylene
Museum of Modern Art, New York

OPPOSITE, BOTTOM RIGHT
340. Joe Colombo (1930–1971)
***Universale* chairs**, 1965–67
Made by Kartell (Italy)
ABS plastic
Museum of Modern Art, New York

BELOW
341. Anna Castelli Ferrieri (1920–2006)
Storage modules, 1967–69
Made by Kartell (Italy)
ABS plastic

BELOW
342. Osvaldo Borsani (1911–1985)
***P40* chair with auto-adjusting armrests**, 1955
Made by Tecno (Italy)
Steel painted black, fabric
Vitra Design Museum, Weil am Rhein, Germany

OPPOSITE
343. Achille Castiglioni (1918–2002) and Pier Giacomo Castiglioni (1913–1968)
***Arco* lamp**, 1962
Made by Flos (Italy)
Marble, stainless steel, aluminum, electrical components

1959. Flos, founded in Merano to make indoor lights with a spray-on plastic called "cocoon," would begin producing designs by the Castiglioni brothers in Brescia in 1961, such as the very innovative *Arco* lamp (1962), destined to become a design icon (plate 343). With its long steel arm arcing up from a marble base, it provided a freestanding source of overhead light, unattached to the wall or ceiling.

Historic businesses were also overhauled: at the initiative of Osvaldo Borsani, an architect who received his degree in 1937, his family's Atelier Borsani in Varedo (outside Milan) became Tecno, a name well-suited to its research into new materials and its new range of modular products. The *D70* sofa (1954); the *P40* chair (1955), equipped with flexible armrests and an adjustable back (plate 342); and the articulated *L77* bed (1957), also adjustable, broke new ground. Arteluce[30] reopened its doors with a store-workshop, where Gino Sarfatti,[31] trained in naval and aeronautical engineering, continued the work he had begun in 1939, designing and producing more than four hundred lamps that were innovative not only in their materials and light sources but also in their production techniques and visual impact (plates 344–46).[32]

In the Marches—a region of central Italy that made a significant contribution to Italian design, conceiving and producing all sorts of items, from the smallest household articles to high-tonnage ships—the third generation of the Guzzini of Recanati was ready to set to work. Since 1912, Fratelli Guzzini (which had called on the design talents of Gio Ponti and especially Luigi Massoni) had offered items for the table and home, first in ox horn, then in Plexiglas (it is said to have salvaged the windows of airplanes stockpiled by the Azienda Rilievo Alienazione Residuati),[33] and finally in plastic. The innovative solution of two-tone melded plastic sheets dates to 1953, injection molding to 1955–60. But the Guzzini were not about to stop there: in 1963, they added a second company, iGuzzini Illuminazione, for which personalities such as Piero Castiglioni and Renzo Piano, as well as many foreign designers, would work over the years.

During those same years, Giuseppe Brion was a technician at Phonola, then at Radiomarelli, where his wife, (Ono) Rina Tomasin, one of the first women entrepreneurs, also worked. He laid the foundations for an important though short-lived venture: in their free time, Giuseppe and his wife assembled radios for third parties, and then began to produce their own electronics under the brand names Vega (after the star), Radio

LEFT
344. Gino Sarfatti (1912–1985)
***2097/30* ceiling lamp**, 1958
Made by Arteluce (Italy)
Chrome-plated steel
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

BELOW
345. Gino Sarfatti (1912–1985)
***566* desk lamp**, 1956
Made by Arteluce (Italy)
Brass, lacquered metal, painted steel, electrical components
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

OPPOSITE
346. Gino Sarfatti (1912–1985)
***534* table lamp**, 1951
Made by Arteluce (Italy)
Brass, lacquered metal, painted steel, electrical components
Galerie Kreo, Paris

Vega Television, and finally Brionvega. Initially the firm was very successful,[34] thanks to the work of several designers: Bonetto, Zanuso, Sapper, and the Castiglioni brothers. The Brions had a unique ability to grasp the potential of the different approaches these designers pursued: Rodolfo Bonetto's "technological" look, Zanuso and Sapper's minimalism avant la lettre, the irony of the Castiglioni brothers' Dadaist language (plates 347–50). All were allowed absolute freedom in their choice of materials—plastics, wood, or metal. Despite their different forms, many of the firm's products had at least one quality in common: they occupied a space halfway between the static and the portable.

That was true of Zanuso and Sapper's *TS 505* radio (1964); the Castiglioni brothers' *RR 126* stereo system (1966); Mario Bellini's *RR 130* hi-fi system (1970); and Sapper's *Sound Box* portable radio-recorder (1974). The objective was to create appliances that could be used throughout the house and sometimes even outdoors, on those first excursions that the Italians were coming to enjoy so much.[35] Zanuso's *Black ST 201* television (1969) had, like certain other appliances of its type, the look of an abstract object, anticipating minimalism. Zanuso and Sapper were always up-to-date, almost predicting the future at times, as attested by the *Grillo* (Siemens, 1965), the precursor of all the flip phones we use today, a "phone held in the palm of the hand" (plate 356). More than that, it is a piece of interior decor, both casual and suggestive.

MILAN AND THE SPREAD OF DESIGN

In the early 1950s, the Milan of industry and commerce, of business and culture, began to consolidate. The close relationship between art and industry, which dates back to the 1930s and is one of the city's characteristic features, was fueled by a dense network of artisanal workshops, specialized publications, and, above all, major events—not only the Triennale but also international showcases such as the Milan Trade Fair. During those years, a certain fervor surrounded the culture of "production," in the best sense of the word: in other words, the culture of industrial design, of the project.

In 1951, the Ninth Triennale—with staging by Luciano Baldessari, a large light installation by Lucio Fontana, and Antonia Campi's ceramic panels—welcomed two exhibits fundamental to the history of design. The *Form of the Useful* exhibit, whose name would later become a slogan, addressed the question of industrial design, with the notion of utility replacing that of mass production, while the *Home Salon* provided a first sampling of the furniture and utensils being produced. Ponti wanted the Triennale to be "open to all trends":

347. Achille Castiglioni (1918–2002) and Pier Giacomo Castiglioni (1913–1968)
***RR 126* stereo system**, 1966
Made by Brionvega (Italy)
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

the different commissioners emphasized the modernist style, while Sweden and Finland displayed, in an elegant space, their famous furniture, sought out by all who wanted to modernize their way of life.

In the meantime, the famous department store La Rinascente had reopened its doors, with its own graphic arts and publicity department run by Max Huber, who sought not only to sell Italian taste but also to influence it. From 1952 on, the store held an influential annual exhibition called *The Aesthetics of the Product*, which gave rise to the idea of awarding a prize to the best industrial designers and their creations.

Similarly, the thirtieth Milan Trade Fair included *Art and the Industrial Aesthetic*, an exhibit that would return the following year, in 1953. Launched in 1920, the Milan Trade Fair displayed many remarkable experiments in style and materials, and connected architects, designers, and artists to industry. In 1946, it again became a springboard for industrial design. At that first postwar fair, the prototype of the *Candy* electric washing machine, Italy's first such device for the home, was on view (produced by the Officine Meccaniche Eden Fumaggali of Monza, newly reconverted to civilian use). Also displayed were machine tools, shoes, toys, electrical appliances, and equipment for processing plastics. The following year, the furniture manufacturers, like the automobile manufacturers, were granted an entire pavilion. In 1961, the Milan furniture fair, properly the Salone Internazionale del Mobile (organized by Cosmit, the Comitato per il Salone del Mobile Italiano), became completely autonomous, and in subsequent years it was held in September, replacing the traditional Trade Fair in April. That shift played a large role in drawing the public's attention to furniture made in Italy. The Milan furniture fair was an attentive witness to changing trends, first in the aisles of the Trade Fair and later in the new pavilions in Rho Pero. From the 1980s on, it would become the epicenter for a series of concurrent events, which increasingly mobilized the entire city and were often intended to broaden the official themes of the fair. Every year in April, therefore, Milan became "the city of design."

The review *Domus* (no. 269, 1952) had published a *Manifesto of Industrial Design* that—already!—detailed a few of the paradoxes of the Italian case, and in particular the official nonexistence in Italy of the profession of designer (a situation that persists today), even though the designer's work, for its part, had a concrete existence, and indeed a great aesthetic coherence. It was acknowledged that "the moment had come for industrial design, taste, aesthetics, and products for the home."

BELOW
348. Marco Zanuso (1916–2001)
***TS 502* radio**, 1964
Made by Brionvega (Italy)
Museum of Modern Art, New York

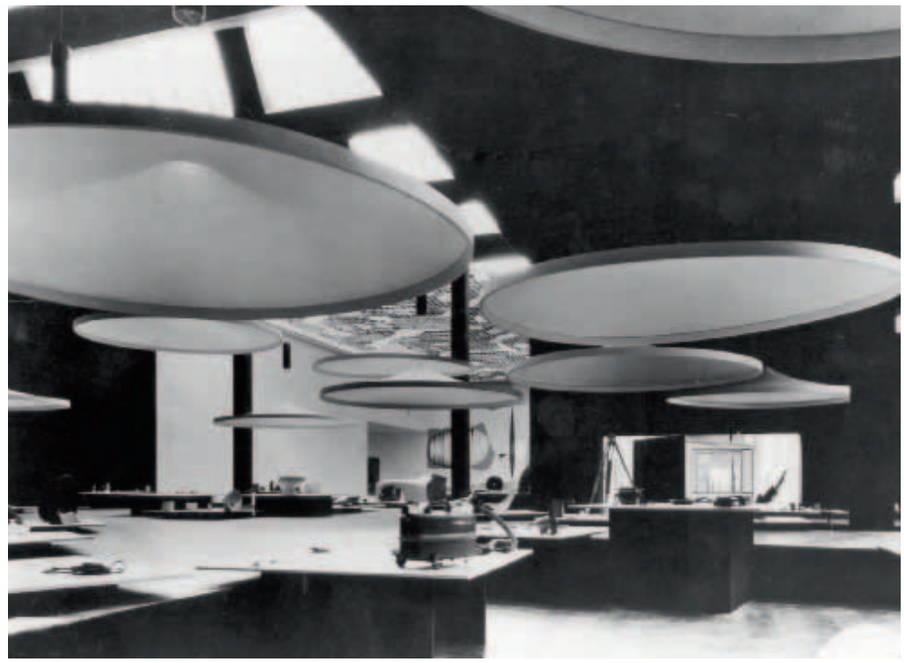
OVERLEAF
349. Richard Sapper (b. 1932) and Marco Zanuso (1916–2001)
***Doney 14* portable television set**, 1962
Made by Brionvega (Italy)
Centre National des Arts Plastiques/Fonds National d'Art Contemporain, Paris

PAGE 289
350. Richard Sapper (b. 1932) and Marco Zanuso (1916–2001)
***Algol 11* television set**, 1964
Made by Brionvega (Italy)
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

RIGHT
351. **View of the tenth Triennale di Milano**, 1954

OPPOSITE, LEFT
352. **View of the eleventh Triennale di Milano**, 1957

OPPOSITE, RIGHT
353. ***Comparative Exhibition of Glass and Steel* organized by Franco Albini and Jay Doblin at the twelfth Triennale di Milano**, 1960

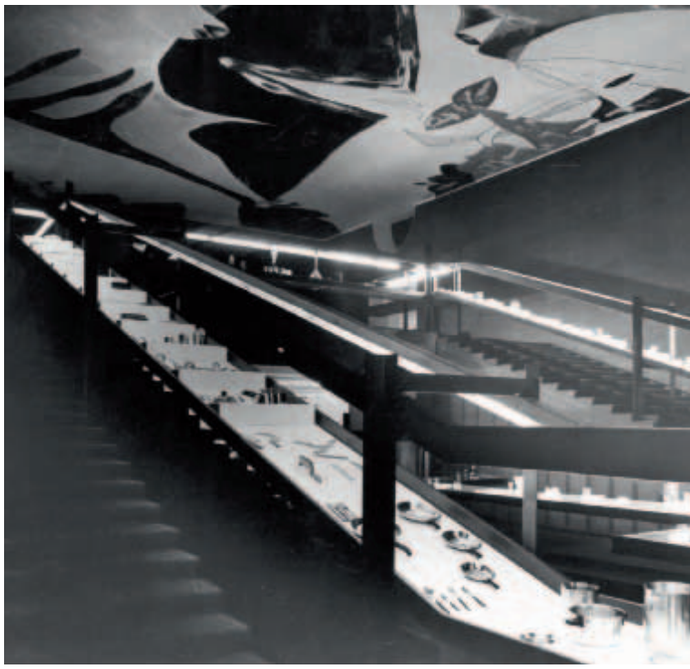


It was in 1954 that industrial design truly gained the starring role. The tenth Triennale played host to the first annual conference of the International Congress of Industrial Design, as well as an accompanying exhibition (plate 357). At the conference, the position taken by Giulio Carlo Argan caused a tremendous stir. As Enzo Frateili wrote, "[Argan] compared design to urban planning, drawing a parallel between housing developments and the distribution of goods and their formal quality. He then identified the presence of two spatial aspects of the object: the space of function and the space of representation."[36] The purely cosmetic role of industrial design, as it was conceived in the U.S., was therefore rejected. Discussions centered on producing an industrial object in accordance with an artistic, even intelligent design. There were even predictions that such a path would not be at all difficult for the Italians to take. The philosopher Enzo Paci observed that "the designer is situated between art and society," that he "invents forms that have never been produced and that, in their organic unity, express new ways of life." The figure of the designer was thus becoming emancipated from that of the architect and the artist. At the close of the congress, a motion expressed the desire that the Triennale might encourage the creation of a serious school of industrial design. This motion was perhaps inspired by Max Bill, who had spoken at length of the Hochschule für Gestaltung (a sort of "New Bauhaus") he had founded in Ulm, where many Italians would go as teachers or students.

In displaying Scandinavian, English, and German creations (from the Ulm school and Braun), and in putting the spotlight on the Italians, the exhibition presented alongside the congress sought to demonstrate that the Bauhaus was outmoded. The 150 objects on view—all in production—provided a snapshot (though a somewhat arbitrary one) of postwar industry.

Stile Industria appeared during the same period. That extraordinary review, which began as a column in *Domus* and was edited by Alberto Rosselli, would, for nine years, be a primary venue for discussing all aspects of design, architecture, production, and style—even the ethics of the designer. It was also at that time (1954) that the first Compasso d'Oro was awarded by La Rinascente. Stemming from an idea shared by Ponti and Rosselli, this prize was intended to recognize manufacturers, artisans, and designers involved in research—both technical and formal—on industrial production, those who had succeeded in synthesizing a product's aesthetic quality and its functional characteristics. Originally, the award included all consumer goods within its purview. The jury was always composed of leading personalities: not only Ponti and Rosselli but also Zanuso, Rogers, Albini, and Pier Giacomo Castiglioni. Very quickly, the Compasso d'Oro became an occasion to take stock of the state of design (production, producers, designers, modes, and means). In that respect, it has the value of a historical document: the list of winners tells the story of Italian design and of the different designers who succeeded one another season after season. The fifth (1959) through eighth (1964) Compasso d'Oro awards were administered by the Associazione per il Disegno Industriale (ADI), which would subsequently organize the competition on its own. The first cycle of the Compasso d'Oro came to an end in 1970, but the prize would be reestablished in 1979 after lengthy debates.[37]

The ADI was founded in 1956 by a group of designers and enlightened manufacturers who wished to promote and institutionalize the still avant-garde



contributions of design. The ADI had its first headquarters at Ponti's studio on via Dezza in Milan. Sixty people attended the initial meeting, convened at the Museo delle Scienza e della Tecnologia,[38] a site that was chosen quite deliberately, since it was there that Ponti had imagined creating a section devoted specifically to industrial design. (He wanted design to be linked not to art but to technology.) Rossi was elected the first ADI president, while two designers—Enrico Peressutti, a member of the BBPR agency, and Albe Steiner—and two manufacturers, the Milanese Giulio Castelli and the Venetian Antonio Pellizzari, served on the steering committee.

From the start, the association's activities were quite varied. It organized congresses and exhibitions to publicize signature products in Italy and abroad, and hosted the congress of the International Council of Societies of Industrial Design (ICSID) in Venice in 1961, and again in Milan in 1983, when the theme was "From the Spoon to the City." This slogan, coined in 1952 by Ernesto Nathan Rogers, echoed a 1917 saying by the Turin Futurist Nicola Galante: "From the *palazzo* to the fork." It had the merit of encapsulating the designer's field of operation, and it affirmed the inseparability of form and function, which Rogers had adopted as a guiding principle of the Italian reconstruction.

The problems facing the field of design are reflected in the proceedings of the ADI over the years:[39] the need to protect the designer's professional status, to establish a school for training designers, and to create a "permanent display of products," in other words, to found a museum of design. That last point would come up often and would in a certain sense be resolved in the first decade of the twenty-first century.[40]

The eleventh Triennale (1957) followed the same line as the previous one: it too hosted an exhibition on industrial design, highlighting, in a deliberately didactic manner, both artisanal products and those manufactured by the most advanced technology (plate 352). To borrow Rosselli's words, "the hypothesis of a European culture of design now appears to be an imminent reality."

From the twelfth to the sixteenth Triennale (in 1982), industrial design would no longer be presented separately. Nonetheless, the twelfth Triennale (1960), whose theme was "Home and School," included an interesting comparative exhibition centered on materials: Albini and Jay Doblin selected products in glass and steel from the four corners of the world and exhibited them up and down the grand staircase (plate 353). The thirteenth Triennale, which adopted the guiding theme of "Free Time" and emphasized the concept of the overall environment, was held in 1964, which would go down in history as the year of Pop art. Not only the Triennale but also the Venice Biennale of that year would instill a Pop spirit in many everyday objects.

The fourteenth Triennale opened in May 1968, within a context of heightened criticism (and the protest movement did not spare the Triennale). Its theme, "The Masses," anticipated a debate that would soon be of great relevance. Giancarlo De Carlo, Rosselli, Steiner, Vigano, and Zanuso were on the council that set out the main lines of the event, which was divided into different sections ("Errors," "Information," "Perspectives"). A choice position was given to a group of young Italians—M. Platania, A. Barrese, S. Delfino, A. Grassi, G. Laminarca, A. Marangoni, and J. Gardella—who examined the ecological challenges presented by the lack of potable water, a subject little known at the time. Visitors reached the *Italian Expressions and Products* space

354. Vico Magistretti
(1920–2006)
***Guione* floor lamp**, 1970
Made by Artemide (Italy)
Lacquered metal, electrical components
Museum of Modern Art, New York

though a tire tunnel, which had the effect of emphasizing the strangeness of that exhibit. Presented side by side were various proposals for a different living environment, such as the "programmable, flexible, and adjustable housing system" designed by Joe Colombo.

In the 1950s, Milan was also home to a few specialized showrooms that would become true reference points for design. In 1953, Fernando and Maddalena De Padova had opened a space on via Montenapoleone (later moved to corso Venezia), with the initial aim of raising public awareness about Scandinavian design, which was enjoying a certain success thanks to the Triennales. Then their space itself became a site of production, with the support of several designers, especially Vico Magistretti.[41] An architect and the son of an architect, Magistretti paid particular attention to the home and to interior design, a subject he approached as a designer not only of buildings but also of furniture and objects (plate 354), many of which are now considered contemporary classics. He designed the *Selene* chair (1967) and the archetypal *Eclisse* lamp (1967) for Artemide (plate 355); the *Maralunga* sofa (1973) for Cassina; and a pioneering textile bed, first in a long series, the *Nathalie* (1978) for Flou, which presented itself as a "bed stylist," the distributor of a single model.

In 1957, also in Milan, Arform opened at the initiative of Paolo Tilche, to market and later produce modern furniture and accessories. So too did Centro Fly, a store that impressed customers with its escalators, background music, and labels (which clearly displayed the names of the designers—a real innovation at the time). For the most part, Centro Fly showcased kitchenware: "A million new things for a million beautiful things."

The capital of Lombardy was, moveover, a center of specialty publishing, which contributed significantly to the development and diffusion of Italian industrial design, particularly furniture and decorative accessories. In 1989, Eugenio Battisti counted fifty-six magazines in Italy devoted to architecture, fourteen to urban planning, twenty-six to furniture, and eighteen to design in the narrow sense. Of all these titles dealing with *progetto* (design), forty-seven were published in Milan.

While under the direction of Ernesto Nathan Rogers (from 1954 on), *Casabella* would be less attentive to design. It was not until 1970–76, with Alessandro Mendini as editor, that it would become an organ for publicizing experiments in radical design.[42] *Domus*, which returned to Ponti's hands in 1949, regularly took an interest in furniture and decoration throughout the 1950s. The review, which Cesare Casati coordinated between 1961 and 1978, also organized the Eurodomus exhibitions, which took place in Genoa (May 1966), Turin (spring 1968 and May 1972), and Milan (May 1970, at the Palazzo dell'Arte). The aim of these events was to present experimental solutions for the home, by placing furniture within the contemporary world and bringing it face-to-face with products from other countries. New materials were also prominently featured.

In addition to the short but intense run of *Stile Industria*, already alluded to, a few other reviews are worth mentioning. *Interni* first appeared in 1954 as a "Magazine of Interior Decoration" and continues to be on the cutting edge of furniture and accessories. In the last few decades, it has also organized many satellite events during the Milan furniture fair. In 1961, Piera Peroni founded *Abitare* (initially titled *Casa Novità*), a review that has always been careful to address the relationship between human beings and their living environment, although it has undergone various changes in direction and editorial policy.[43] The first issue of *Casa Vogue,*

BELOW
355. Vico Magistretti (1920–2006)
***Eclisse* lamps**, 1967
Made by Artemide (Italy)
Lacquered aluminum, electrical components
Museum of Modern Art, New York

BOTTOM
356. Richard Sapper (b. 1932) and Marco Zanuso (1916–2001)
***Grillo* telephone**, 1965
Made by Sit-Siemens (Italy)
Museum of Modern Art, New York

RIGHT
357. Achille Castiglioni (1918–2002) and Pier Giacomo Castiglioni (1913–1968)
***Snoopy* lamp**, 1967
Made by Flos (Italy)
Enameled metal, marble
Museum of Modern Art, New York

OPPOSITE
358. Gae Aulenti (1927–2012)
***Sgarsul* rocking chair**, 1962
Made by Poltronova (Italy)
Lacquered wood, leather
Photograph by Carol-Marc Lavrillier, 1972
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

initially conceived as a supplement to *Vogue,* appeared in 1968. That review, under the direction of Isa Vercelloni until 1992, showcased homes as they were lived in and paid constant attention to social phenomena. Also noteworthy are *Forme* ("of the useful" is implied), launched by Luigi Massoni in 1963, and *Formaluce*, edited by A. M. Prina from 1968 on and dedicated to lighting.

While these magazines are all brought out by conventional publishers, manufacturers have also created their own periodicals. For example, from 1964 to 1991 the Busnelli Industrial Group published the semiannual *Caleidoscopio*, whose columns welcomed lively discussions of the culture of contemporary design. In 1967, eight businesses working in the areas of furniture and lighting (Arflex, Artemide, Bernini, Boffi, Cassina, Flos, Icf, and Tecno) partnered to publish a joint review, *Ottagono*.[44] The state-owned giant Finmeccanica published *Civiltà delle Macchine*; Olivetti, *Zodiac*; and Pirelli-Linoleum, *Edilizia moderna*. Issue 85 of *Edilizia moderna*, which appeared in 1964 and was devoted to industrial design, won the Compasso d'Oro in 1967. Finally, from 1956 to 1969, *Qualità*—the publication of Kartell, launched by Giulio Castelli and designed by Michele Provinciali—explored, in eleven installments, the question of synthetic materials in the culture of design.

THE TURN OF THE 1960S

In the 1960s, some designers yielded to the temptations of the Neoliberty current, whose manifesto was the exhibition *New Models for Italian Furniture*, held in Milan in March 1960. They revisited, in a critical way, an experiment that had been very successful in Italy at the beginning of the twentieth century, namely, the adoption of American-inspired "styling." Among the major representatives of Neoliberty were Vittorio Gregotti, Ludovico Meneghetti, and Giotto Stoppino, who together created the *Cavour* chair (1959, SIM-Novara, reissued by Frau); Gae Aulenti, who designed the *Sgarsul* rocking chair in curved beechwood (1962, Poltronova; plate 358); and the Castiglioni brothers, who conceived the *Sanluca* chair (1960, Gavina), with a plastic frame entirely covered in leather and fabric, as well as the *Spinamatic* beer tap.

Achille[45] and Pier Giacomo Castiglioni can be credited with a particular approach to design, with a clearly recognizable style: the ready-made, an obvious reference to Dadaism. The one constant in all their work is a hint of lightheartedness, combined with a form of irony that seeks to demystify and minimize the designer's role. The Castiglioni brothers had a unique capacity to assemble humble objects (or parts of objects) and give them a new expressiveness, an autonomy, and a true dignity (plate 357). For example, the *Mezzador* (Sharecropper) stool is composed of a tractor seat mounted on a steel blade, with a beechwood base (plate 366). (The third Castiglioni brother, Livio, would work independently in the areas of lighting and sound, becoming the leading Italian lighting designer.)

The various objects labeled "Pop design" are distinguished by their whimsical shapes and their inventive use of materials (including unusual ones, especially

tires), and often by their ironic bombast and large dimensions. The *Blow* chair, designed for Zanotta by DDL (De Pas, D'Urbino, and Lomazzi, 1967)[46] is *the* symbol of Pop design (plate 359): it nearly realizes the utopian objective of Marcel Breuer, who dreamed of being able to sit on "a transparent and elastic column of air," as Rainer Wick remarked in the pages of *Kunstforum International* in 1968. Made of molded polyurethane foam, DDL's *Joe* chair (distributed by Poltronova in 1970), whose name alludes to baseball legend Joe DiMaggio, can also be called Pop (plate 361). So too can the *Sacco*, the free-form, self-adjusting beanbag chair by Gatti, Teodoro, and Paolini (1968, Zanotta), filled with thousands of polystyrene pellets (plate 360). The Pop creations of the Gufram Company[47] (founded 1968) include the *Pratone* chair by Ceretti, DeRossi, and Rosso (1971), made up of tall blades of foam-rubber "grass" that create the effect of an artificial "lawn" to stretch out on (plate 362), and Drocco and Mello's *Cactus* coatrack (1970). These objects, which at first had little success, achieved cult status during the 1980s, with the vogue for retro furniture.

In the 1960s, other experiments readily attested to the relationship between art and design. Dino Gavina,[48] for example, commissioned artists like Man Ray to design everyday objects. A rule-breaking pioneer, Gavina began to produce furniture at a store-workshop in Bologna in 1953 in collaboration with Mollino, the Castiglioni brothers, and Scarpa. His *Bastiano*, the archetype for a new kind of a sofa, has a very simple structure: it is a basket filled with cushions. He also produced furniture designed by Marcel Breuer, whom he met in New York in 1962.

The furniture produced by Poltronova (founded in Tuscany in 1956 by Sergio Cammilli, after a decisive meeting with Ettore Sottsass)[49] is also quite poetic. An architect and designer who graduated from the University of Turin but was active in Milan from 1947 on, Sottsass took over the computer design department of Olivetti in 1957. In that capacity, he designed the *Elea 9000*, the first large computer produced in Italy (1960). He advocated a new kind of design that went beyond functionalism, and constantly endeavored to find more sensuous ways to use form and color. Beginning in the early 1970s, he would play a prominent role in the adventure of radical design. He was also behind a

OPPOSITE
359. Jonathan De Pas (1932–1991), Donato D'Urbino (b. 1935), and Paolo Lomazzi (b. 1936)
***Blow* armchair**, 1967
Distributed by Zanotta (Italy)
Inflatable PVC
Museum of Modern Art, New York

BELOW, LEFT
360. Piero Gatti (b. 1940), Francesco Teodoro (1939–2005), and Cesare Paolini (1937–1983)
***Sacco* chair**, 1968
Distributed by Zanotta (Italy)
PVC-coated fabric, polystyrene pellets
Musée des Arts Décoratifs, Paris

BELOW, RIGHT
361. Jonathan De Pas (1932–1991), Donato D'Urbino (b. 1935), and Paolo Lomazzi (b. 1936)
***Joe* chair**, 1970
Distributed by Poltronova (Italy)
Polyurethane foam, leather
Museum of Modern Art, New York

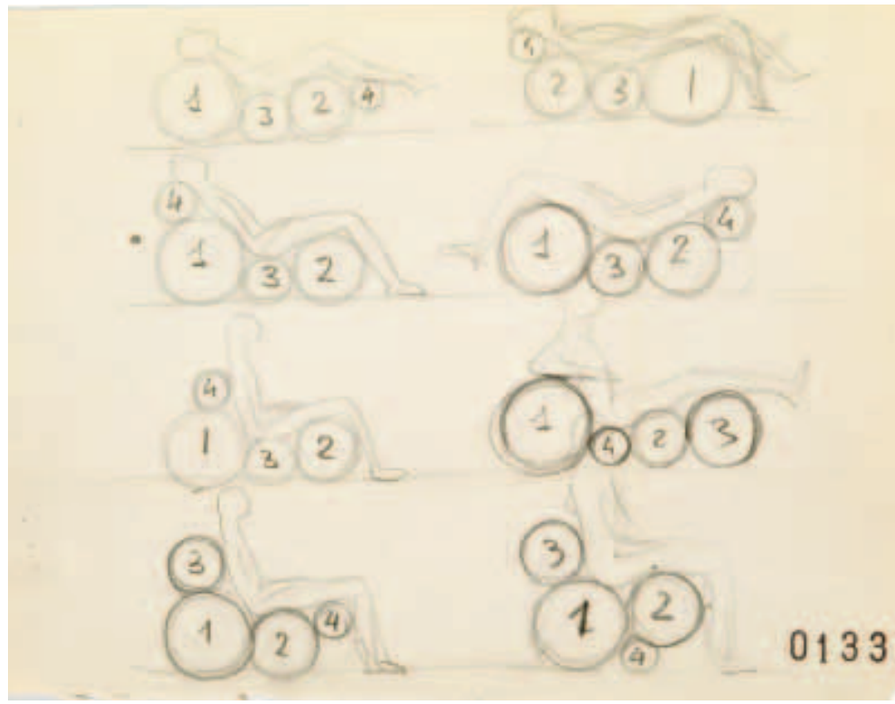
BOTTOM
362. Giorgio Ceretti (b. 1932), Pietro Derossi (b. 1933), and Riccardo Rosso
***Pratone* sofa**, 1971
Distributed by Gufram (Italy)
Polyurethane foam
Vitra Design Museum, Weil am Rhein, Germany

BELOW
363. Joe Colombo (1930–1971)
Sketch of the *Tube* chair, 1969
Pencil on paper
Musée des Arts Décoratifs, Paris

OPPOSITE, TOP
364. Joe Colombo (1930–1971)
***Tube* chair**, 1970
Made by Flexform (Italy)
PVC, polyurethane, metal, burlap
Musée des Arts Décoratifs, Paris

OPPOSITE, BOTTOM LEFT
365. Joe Colombo (1930–1971)
***Boby* storage unit on castors**, 1969
Made by Bieffeplast (Italy)
ABS plastic
Museum of Modern Art, New York

OPPOSITE, BOTTOM RIGHT
366. Achille Castiglioni (1918–2002)
***Mezzadro* stool**, 1970 (prototype designed for the eleventh Triennale di Milano, 1957)
Made by Zanotta (Italy)
Tractor seat mounted on steel blade and beechwood base, secured by a bicycle wing nut
Museum of Modern Art, New York



cutting-edge housing project, created for *The New Domestic Landscape: Achievements and Problems of Italian Design*, a major exhibition organized by Emilio Ambasz for the Museum of Modern Art in New York. This exhibition, which surveyed the different avant-garde currents of the 1960s, was an important watershed in the culture of Italian design. Sottsass championed plastic in the Environments section, with movable cabinets and wheeled containers (designed for Kartell) that could be used to mark off the different areas of the house.

For a few years, in fact, domestic interiors had been undergoing a transformation, which was reflected in the objects they contained. The first room to change was the kitchen. The tiny space reserved for food preparation expanded to become a multipurpose environment, the true heart of the home, as it had been in earlier times. Its furnishings also became more diverse, adapting themselves to the new dimensions and then the new functions of the kitchen. A gradual shift occurred from the modular kitchen to a new, more comfortable arrangement, and from craftsmanship to standardized industrial production. First there were modules made of metal, laminates, and wood, such as the *T12* (Boffi), which Gian Casé displayed at the Triennale of 1960. Then there were the audacious and visionary (for the time) "monoblocs," inspired by the principles of the total living environment. For the most part, these units remained at the prototype stage. The *Mini Kitchen* on castors (Boffi, 1963–66, still in production) initially met with little success. And yet, in a space measuring only eighteen cubic feet (0.5 m^3), it contained all the indispensable elements. It was designed by Joe Colombo.[50]

A painter by training, Colombo created many products during his short career, in addition to his avant-garde plans for housing modules. New materials (fiberglass, ABS, polyethylene, PVC, methacrylate) prompted him to imagine unusual combinations and to introduce new types of object (plates 363–65). The *Acrilica* lamp, for example, had a C-shaped Plexiglas diffuser and a metal base housing a little fluorescent tube (1962). The *Smoke* drinking glass abandoned the traditional symmetry (1964), while the *Universale* chair was made of a single piece of molded plastic (Kartell, 1965). The *Alogena* lamp became an archetype: it was the first to use a halogen bulb (1970, O-Luce). But in particular, Colombo thought that "all the objects needed in a house ought to be integrated into the usable spaces . . . and as such ought to be called 'equipment'"—like the *Kitchen-Box* unit, both kitchen and dining room; the *Central-Living* block; the *Night-Cell*, which served as a bedroom, wardrobe, and bathroom (for Bayer's *Visiona* exhibit); and the *Cabriolet*, a "bed–living system" (1970; plate 367).

The bathroom expanded as well, increasingly becoming a place devoted to the care of the body. Fixtures were still made from ceramic, but they were no longer limited to white: Antonia Campi,[51] first for SCI, then for Richard Ginori–Pozzi Ginori, introduced unexpected colors and color combinations, more sculptural forms, and better ergonomics. A few decades later, the unit

367. Joe Colombo (1930–1971)
Experimental interior *Visiona 1* for *Bayer AG*, exhibited at the 1969 Cologne furniture fair
Joe Colombo Archives, Milan

368–70. **A chair from Gaetano Pesce's *Up* expands after being removed from its vacuum-sealed packaging**

and monobloc solutions imagined by Giulio Minoletti and Rosselli, among others, had gone out of style. Working for Teuco, Giovanna Talocci—initially with the collaboration of Fabio Lenci—chose to use plastics, which, thanks to their malleability, allowed for a multitude of possibilities.

Ideas proliferated, and some companies opened research centers. At C&B, between 1965 and 1973, Cesare Cassina and Piero Busnelli offered designers the opportunity to experiment with cutting-edge technologies. Gaetano Pesce used vacuum compression to create the *Up* series of lounge chairs in polyurethane foam (1969; plate 371), which rapidly became icons of Italian and international industrial design. The form of the *UP5* chair was inspired by votive statues of fertility goddesses, and is virtually a manifesto on women's condition (plates 368–70). And though Pesce still preferred plastics, he put them to alternative uses: in the *Dalila* chair (Cassina, 1980), the *Tramonto a New York* sofa (Cassina, 1980; plate 374), the *Feltri* chair (Cassina, 1987; plate 373), and the *Vesuvio* coffeemaker (Zani & Zani, 1993), for example.

A designer, architect, and artist, Pesce formulated his *First Manifesto for a Flexible Architecture*[52] at a conference in Jyväskylä (Finland) in 1965. In Padua in 1959, he had joined Gruppo N with nine other artists. This was one of many groups that, under the label "programmed art," then "kinetic art" and "gestalt art," sought to exploit all the possibilities of a work (mechanical, electro-

371. Gaetano Pesce (b. 1939)
_UP5_ chair, _UP6_ ottoman, and four _UP3_ armchairs, 1969
Distributed by C&B (Italy)
Polyurethane foam, jersey
Courtesy Gaetano Pesce

magnetic, and so on) by "programming" its movement in an almost scientific fashion. After 1961, this international current in art came to be known as New Tendencies, and its adherents included not only individual artists and designers, such as Munari, Enzo Mari,[53] and Dadamaino, but also groups that theorized the anonymity of products and the disappearance of the artist's signature. After Gruppo N in Padua, Gruppo T formed in Milan; one of its members was Gabriele De Vecchi, who would become a noted designer of silver.

In Verrucchio (Emilia-Romagna), Argan surveyed the international situation, presented the problem of art's social function, and called for reducing the gap between artistic production and collective use. In the years that followed, the Milanese Gruppo Mid (Antonio Barrese, Alfonso Grassi, Gianfranco Laminarca, and Alberto Marangoni) also tackled design (plate 378). In 1966, the question of the multiple in art and, even more, new investigations in the field of visual perception, led the group in the direction of large-scale industrial production.[54] They created, among other things, the Bialcol bottle (1975, still in production) and the *Black* razor for Bic (1985).

Enzo Mari took the same route from art to design. He created many products for Driade, a company that had its roots in the prefab sector, distributing Antonia Astori's *Programma 1* modules from 1968 on. In 1970, Mari, the "theorist of design," published *The Function of Esthetic Research*, which announced the revalorization of the figure of the craftsman (a theme he would take up again in 1981, for his exhibition *Where is the Craftsman?*). For Mari, the craftsman is one who invents, possesses a trade, and is able to adapt his own work to fit the needs of the moment.

OPPOSITE
372. **Advertisement for the *Moloch* lamp by Gaetano Pesce (1971), made by Bracciodiferro (Italy)**
Courtesy of Gaetano Pesce

LEFT
373. Gaetano Pesce (b. 1939)
***Feltri* chair**, 1987
Made by Cassina (Italy)
Wool felt, epoxy resin, hemp, polyester wadding, quilting
Musée d'Art Moderne, Saint-Étienne Métropole

BELOW
374. Gaetano Pesce (b. 1939)
***Tramonto a New York* sofa**, 1980
Made by Cassina (Italy)
Laminated wood, polyurethane foam, polyester wadding, fabric
Musée d'Art Moderne, Saint-Étienne Métropole

ABOVE
375. Bruno Munari (1907–1998)
***Abitacolo* bed and play environment**, 1970
Made by Robots (now Rexite) (Italy)

OPPOSITE, TOP
376. Marco Zanuso (1916–2001) and Richard Sapper (b. 1932)
***4999* stackable children's chairs**, 1964
Made by Kartell (Italy)
Injection-molded polyethylene

OPPOSITE, BOTTOM LEFT
377. Pio Manzù (1939–1969)
***Cronotime* table clock**, 1966
Made by Riz Italoro (Alessi since 2010) (Italy)

OPPOSITE, BOTTOM RIGHT
378. Gruppo Mid
***Girondella* (kinetic object)**, 1965
Made by Danese (Italy)
Plastic, polystyrene, corundum granules
Museum of Modern Art, New York

BELOW
379. Superstudio
***Passiflora* lamp**, 1966
Made by Poltronova (Italy)
Perspex
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

OPPOSITE
380. Superstudio
***Bazaar* sofa**, 1969
Made by Giovannetti (Italy)
Polyester, polyurethane, fabric
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

THE 1970S AND '80S: EXPERIMENTS AND ECLECTICISM

The 1960s, a time of dogmatism as much as irreverence, witnessed the coexistence of design, architecture, and fashion, and laid the foundations for the eclecticism of the following decade. Elsewhere in Europe and across the Atlantic, the radical experiment found its guiding principles in the American writers of the Beat Generation (from Jack Kerouac to Allen Ginsberg), in a militancy inspired by Marxism, and in the hippies. In Italy, that movement was characterized by a greater attention to content (rather than form) and to ideology (rather than image). Tomàs Maldonado defined the Italian version of the radical experiment as a "romantic aestheticization of the political act of protest." The task assigned to objects (and to design) was to unsettle the user and raise consciousness. The movement, active between 1968 and 1972, attracted several groups of designers. Most were from Florence, either because utopianism (as an instrument of critical analysis) looked like the most concrete path in that city affected by underdevelopment or because two major representatives of organic architecture, Leonardo Ricci[55] and Leonardo Savioli,[56] were teaching at the time in the Department of Architecture at the University of Florence. Ricci argued that "form is a consequence of the life potential inherent in the object that is preparing to come into being."

Archizoom was formed in 1966 by Andrea Branzi, Gilberto Corretti, Paolo Deganello, and Massimo Morozzi. This group, which would dissolve in Milan in 1973,[57] worked primarily in the field of architecture but also held exhibitions, conceived installations, and created various products, such as the *Superonda*, a modular polyurethane sofa (Poltronova, 1966), and the very innovative *A&O* series of chairs, designed in 1973. The *A&O*, produced by Cassina[58] in 1975, after the group had dissolved, represents a new kind of object, composed of apparently cheap materials that nevertheless bear a strong expressive charge.

The year 1966 also saw the advent of Superstudio, whose members, Adolfo Natalini, Cristiano Toraldo di Francia, Roberto and Alessandro Magris, Giampiero Frassinelli, and Alessandro Poli, engaged in theoretical research around the *progetto* in architecture and design. Superstudio, which disbanded in 1978, designed the *Sofo* modular chairs (Poltronova, 1966) and the *Quaderna* table (Zanotta, 1971), among other pieces (plates 379–80). Gruppo UFO entered the arena in 1967, in the wake of student protests in the Department of Architecture at the University of Florence. It continued until 1978, coordinated by Lapo Binazzi,[59] who sought

BELOW
381. Alessandro Mendini (b. 1931)
***Terra* chairs**, 1974
Made by Bracciodiferro (Italy)
Plexiglas filled with earth and cork
Courtesy Fragile, Milan-Paris

OPPOSITE
382. Giancarlo Piretti (b. 1940)
***Plia* chairs**, 1968
Made by Castelli (Italy)
Aluminum frame, methacrylate, rubber
Museum of Modern Art, New York

to make architecture "spectacular"—to turn it into an event, an urban and environmental guerrilla action.

Another Florentine group was active in the radical movement from 1969 on: Gruppo 9999,[60] which engaged in photomontage and graphic art, video, film, and happenings. Turin was not to be outdone: there, in 1971, Giorgio Ceretti, Pietro Derossi, Carlo Gianmarco, Riccardo Rosso, and Maurizio Vogliazzo created Gruppo Strum (an abbreviation of "For an In*strum*ental Architecture"). Their activities took on an educational, sociopolitical, conceptual, and cultural character, and they particularly distinguished themselves in the radical movement with their seminars and contributions to critical theory. Among their creations in the field of design, in addition to the aforementioned *Pratone* (Gufram, 1971), is the *Torneraj* chair (1972).

Most of these groups participated in the famous New York exhibition *The New Domestic Landscape* (1972). In addition, Archizoom, Superstudio, Gruppo 9999, UFO, Ziggurat,[61] Remo Buti, Riccardo Dalisi, Ugo La Pietra, Gaetano Pesce, Gianni Pettena, and Ettore Sottsass joined a cooperative that was founded in January 1973 by the editorial staff of *Casabella*. This anti-school of design, called Global Tools, a "free school for individual creativity," was, however, never really operational.

From 1970 to 1976, *Casabella* was edited by Alessandro Mendini, an architect, designer, and theorist, and a partner in the Nizzoli atelier. He reenergized the review by linking it to the new tendencies, before going on to create a new magazine, *Modo*, in 1977. Subtitled "A Journal of the Culture of Design," *Modo* opened its columns to everything related to the world of design and manufacturing. It also took an interest in the social phenomena that were gradually transforming industrial production into commodification, which resulted in kitsch. And because this new, resolutely "trendy" magazine carried not only news but criticism, it is an indispensable tool for studying its era. *Modo* continued until 2006 under the editorship of Franco Raggi, Andrea Branzi, Cristina Morozzi, and Almerico de Angelis. Mendini edited *Domus* from 1980 to 1985 and continued to develop his philosophy and methodology through exhibitions and conferences. A "cultural provocateur," he considered every project an essential tool and believed that art and design were closely linked in a permanent dialogue—a one that, in Mendini's case, was founded on entertainment and utopianism.

Mendini also collaborated with Pesce on the Bracciodiferro project for Cassina. In 1971, the company began to test the market by distributing several limited editions to the gallery circuit. Assembled by Aldo Cichero into a collection that would be manufactured in Genoa, this experimental furniture perfectly embodied the spirit of the times and the provocations of the antiestablishment designers. For Bracciodiferro, Pesce designed the *Moloch* lamp (1971), which he hoped would be "useful for large spaces." A true icon of design, it is a blown-up replica of the desk lamp used by so many designers (plate 372). He also created the various versions of the *Golgotha* chair, made of natural resin, as well as the table and desk of the same name; the *Guanto* ("Glove") coatrack; and the *Pugno* ("Fist") chair. Mendini's designs for Bracciodiferro included the *Terra* chair in Plexiglas, cork, and earth (plate 381), the *Voragine*

table in aluminum and brass, the cast-bronze *Letargo* and *Senza Luce* lamps, and the *Monumentino da Casa*, a ziggurat chair in charred or lacquered wood. These pieces were exhibited in Berlin in 1975, next to furniture designed by masters of rationalism, to highlight the dialectical and ideological relationship between these two approaches. This first experiment with one-offs and limited editions led some designers to consider standardization obsolete and to advance the hypothesis that, with technology, it was easy make unique pieces.

Gavina,[62] completely at odds with the reigning ambience, launched a new collection, Ultramobile (1971), with the aim of introducing functional works of art into interior decoration. To that end, surrealist objects were adapted for daily use. Result: the *Magritta* armchair (1971), half upside-down bowler hat, half green apple, a tribute by Sebastian Matta. During that time, Cammilli also dreamed up "inhabitable furniture" for Poltronova, and Mario Ceroli designed his "livable sculptures," the *Furniture of the Valley.*

The collections offered by Alchimia since 1976 are better known and have met with more critical success, especially in the press. Such was the case for the *Bauhaus I* collection, launched in 1979, and for *Bauhaus II*, introduced the following year. In Milan, Alessandro and Adriana Guerriero founded the Group for the Design of Images for the Twentieth Century to produce nonindustrial furniture. This group, which planned to hold exhibitions, initially included Sottsass, Branzi, and Mendini, but ultimately came to represent Mendini's offerings almost exclusively: the *Kandinsky* sofa (1980; plate 383), the *Proust* armchair (1980, with the collaboration of Prospero Rasulo; plate 384), and the *Mobile Infinito* ("Infinite Furniture") series of 1981. The proposed transgressions were almost a return to the grammar of Futurism. The group's products, marking the transition between the radical and the neo-modern, also included clothing, decor, household items, and books, as well as seminars and performances.

The Memphis group, too, orchestrated a "cultural operation": the International Movement for the New Applied Arts, officially launched in September 1981—in the midst of the Milan furniture fair—with a provocative exhibition in a showroom on corso Europa.

OPPOSITE
383. Alessandro Mendini (b. 1931)
***Kandinsky* couch**, 1980
Made by Studio Alchimia (Italy)
Wood, fabric painted in acrylic
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

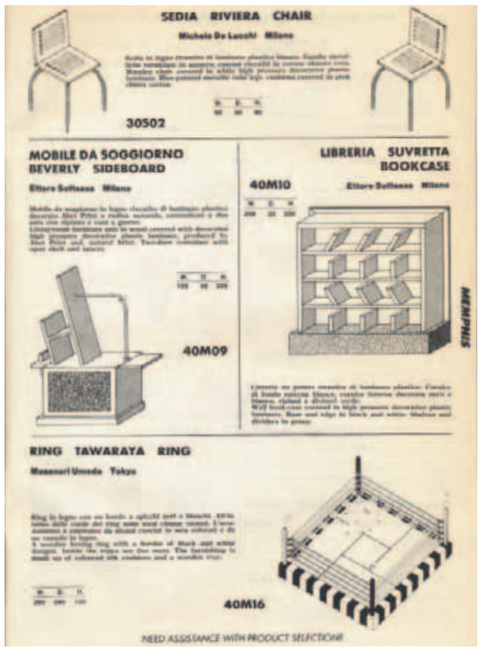
BELOW
384. Alessandro Mendini (b. 1931) and Prospero Rasulo (b. 1953)
***Proust* armchair**, 1980
Made by Studio Alchimia (Italy)
Wood, fabric painted in acrylic
Centre National des Arts Plastiques/Fonds National d'Art Contemporain, Paris, on loan to the Musée des Arts Décoratifs, Paris

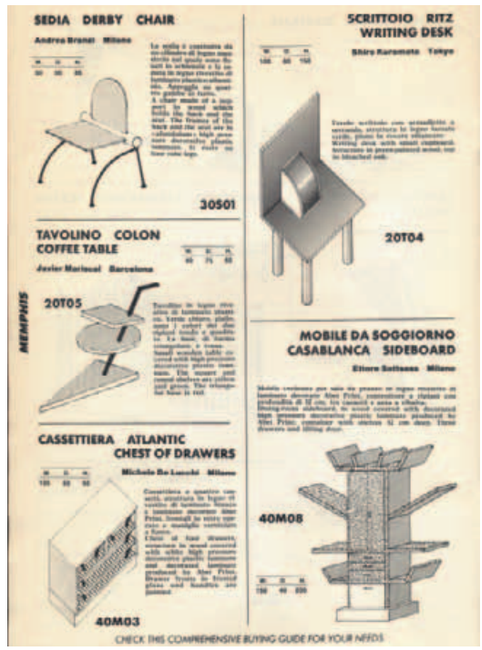
BELOW
385–87. **Cover and interior pages of the *Memphis Furniture Milano* catalog**, 1981

OPPOSITE, TOP LEFT
388. Ettore Sottsass (1917–2007)
***Casablanca* sideboard**, 1981
Made by Memphis (Italy)
Wood, plastic laminate
Victoria and Albert Museum, London

OPPOSITE, TOP RIGHT
389. Michele De Lucchi (b. 1951)
***Kristall* table**, 1981
Made by Memphis (Italy)
Plastic laminate, lacquered wood, metal
Private collection

BOTTOM
390. Michele De Lucchi (b. 1951)
***First* chair**, 1983
Made by Memphis (Italy)
Wood, tubular steel, rubber
Vitra Design Museum, Weil am Rhein, Germany





That first exhibition was conceived by Ettore Sottsass, Barbara Radice,[63] and Michele De Lucchi and realized with the assistance of a handful of young architects. It featured intentionally nonfunctional objects that quoted historical idioms, drawing inspiration from the pioneers of the modern movement in particular: Sottsass's *Carlton* bookcase (1981), itself an icon of design, is one example. Very quickly, the explosion of colors and the light-heartedness of the pieces, all one of a kind, found a host of imitators (plates 385–92).

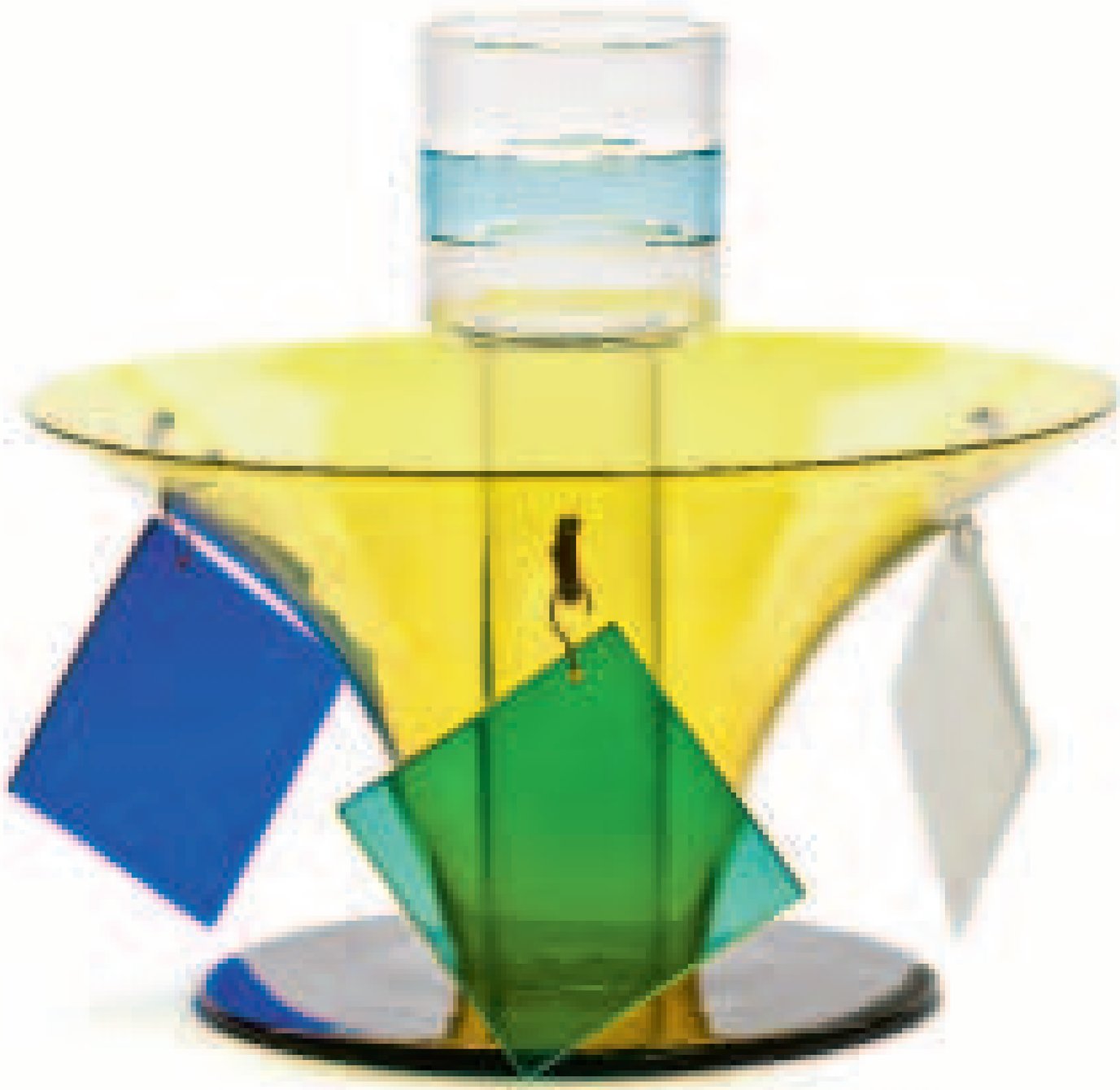
The experiment came to an end in 1987. Two years later, Memphis launched Meta Memphis, which combined art and design to produce the *Ad Usum Dimorae* line of furniture and accessories, conceived primarily by artists.[64] Then, in 1991, it founded Memphis Extra, which offered glass objects. Sottsass and De Lucchi always chose a joyful design for the limited editions and a rigorous functionality for the objects to be mass-produced. And not by chance, perhaps: both had begun their careers at Olivetti, with the pioneering Nizzoli. In 1990, De Lucchi would begin to produce his own work, which he divided among different ateliers, depending on the materials used. Ultimately, he created Produzione Privata, "which he saw as an oasis of freedom—the possibility of realizing projects without taking the market into account."

It was also through the use of distinctive materials (plastic laminate, for example) that the image of contemporary furniture underwent a transformation. Abet Laminati was founded in Bra (Piedmont) in 1946 to produce synthetic finishes, "the first not to be taken from organic plants but developed by man," as Ponti boasted. That business supported the Guerrieros' group and Memphis in their endeavor to create new surfaces and decors.

Alberto Alessi was also interested in limited editions, and in 1971 he established a research center, Arts and Crafts, whose efforts would be focused on design, rather than marketing. His family's business, which had been founded in Omegna, on Lake Orta, in 1921, originally specialized in the production of coffeepots and trays in nickel-plated brass and nickel silver.[65] After he joined the firm, Alessi would revolutionize the domestic landscape with products concerned as much with form as with function. With the playful objects created by the Castiglioni brothers, Sapper, Sottsass, and then younger designers such as Stefano Giovannoni, the Alessi company now worked on two fronts:

OPPOSITE
391. Ettore Sottsass (1917–2007)
***Carlton* bookcase**, 1981
Made by Memphis (Italy)
Wood, plastic laminate
Metropolitan Museum of Art, New York

BELOW
392. Ettore Sottsass (1917–2007)
***Attide* cup**, 1986
Made by Memphis (Italy)
Blown and cut glass, metal fasteners
Musée des Arts Décoratifs, Paris



LEFT
393. Richard Sapper (b. 1932)
***9090* coffeepot**, 1978
Made by Alessi (Italy)
Stainless steel, handle in steel with black oxide finish
Museum of Modern Art, New York

BELOW
394. Luigi Caccia Dominioni (b. 1913), with Achille Castiglioni (1918–2002) and Pier Giacomo Castiglioni (1913–1968)
***Dry* cutlery**, 1938
Made by Ditta Spoggi (Italy)
Silver
Museum of Modern Art, New York

OPPOSITE
395. Achille Castiglioni (1918–2002) and Pier Giacomo Castiglioni (1913–1968)
Condiment set, 1980–84
Made by Alessi (Italy)
Glass, stainless steel
Victoria and Albert Museum, London

mass-produced but refined objects made of plastics, and experimental collections, the result of research into traditional forms such as the coffeepot.[66] Riccardo Dalisi's efforts in this category (1987) were rewarded with a Compasso d'Oro, as was Sapper's *9090* coffeepot (1978; plate 393) and the *Dry* cutlery by the Castiglioni brothers and Dominioni (plate 394). The Officina Alessi has produced experimental objects and reissues since 1983, whereas the A di Alessi brand offers more democratic, "poppier" products in a more accessible price range.

In the early 1980s, a broad debate got under way about "postmodernism," a term that has enjoyed great success, thanks to the writings of Jean-François Lyotard and Gianni Vattimo. The "crisis of reason" called into question all the models of thought on which the modern age had been founded. In the field of design, this corresponded to a challenge to modernism and the international style, which were both accused of neglecting the formal values of objects and their historical meanings, privileging only a functional aesthetic. Greater emphasis was now placed on the expressiveness of the image. The styles of the past were quoted and combined with one another, and greater importance was given to tradition and local memory.

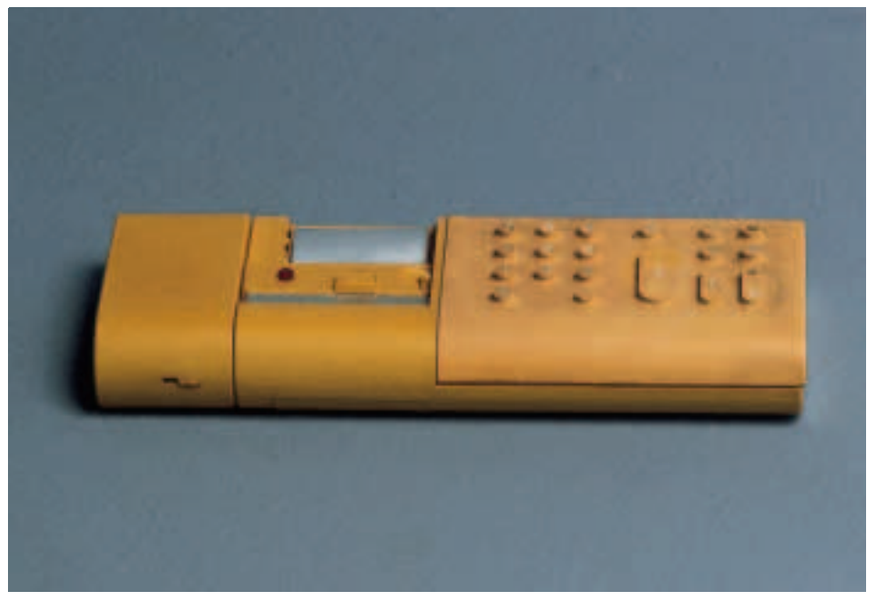
In 1985, the term "neo-eclecticism" also came into use. The magazine *AreA*, published since 1981, became the mouthpiece for that current in its early days. It gave pride of place to classic furniture and accessories, and adapted for its own use the principles of eclecticism, which at the turn of the twentieth century had extolled the mixing of historical styles. *AreA* did embrace certain theories of postmodernism, especially the view that the aesthetic function of the object ought to prevail over its practical use, and that designers should draw from the stylistic repertoire of the past, from classicism to romanticism. Craftsmanship and one-of-a-kind pieces were encouraged, and designs that were stimulating at an emotional level began to be produced once more.

Certain boundary breakers, practitioners of both art and design, like Ugo La Pietra, Nando Vigo, and Prospero Rasulo, paid particular attention to the decorative elements of the object and developed the field of "artistic design." Others invented the concept of "ethnic design," that is, design that remained in contact with the local culture. The term was coined by the same La Pietra, a designer, architect, theorist, and researcher

BELOW, LEFT
396. Mario Bellini (b. 1935)
***Cupola* soup tureen**, 1985
Made by Rosenthal (Germany)
Enameled porcelain
Musée des Arts Décoratifs, Paris

BELOW, RIGHT
397. Mario Bellini (b. 1935)
***Divisumma 18* calculator**, 1973
Made by Olivetti (Italy)
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

OPPOSITE
398. Mario Bellini (b. 1935)
***Teneride* armchair**, 1970
Made by Cassina (Italy)
Polyurethane foam, metal
Musée National d'Art Moderne, Centre Georges Pompidou, Paris



who produced the Telematic House for the 1983 Milan furniture fair, in an attempt to anticipate possible future scenarios. François Burkhardt used the phrase "critical regionalism" to characterize a type of design that emphasized its relationship to artisanal craft, while Branzi invented the label "New Wave Design" to encompass a heterogeneous series of experiments associated with decorative art and artisanal crafts. Paolo Navone[67] gave concrete form to that notion: his objects, halfway between design and craft, attest to the value of the unique object, in contrast to the monotony of mass production.

During those same years, many established companies created brands not only to diversify their offerings and present collections by individual designers, but also to test new markets, as Cassina had previously done with Bracciodiferro. In 1983, Zanotta[68] launched Zabro to distribute artists' pieces, and Acerbis International founded Morphos, intended for a select clientele. In 1984, Driade created Aleph (named after a surrealist short story by Borges), a multilingual laboratory where several non-Italian designers worked.[69] The same year, the famous Bolognese firm Castelli introduced the Castilia brand, for which Giancarlo Piretti designed the *Dilungo* table (1985–86), equipped with a pull-out shelf—in accordance with a philosophy of showing all the possible extensions of the work. He also created the *Plia* chair (plate 382) and the *Diletto* bed, which mechanically adjusted to different positions (with the footrest serving as a multifunctional support). This bed was conceived by Mario Bellini, a designer and architect long employed by Olivetti, where he was responsible for the *Divisumma 18* calculator (1973; plate 397), the *Praxis 35* typewriter, and the *Quaderno* portable computer (1992). Deeply interested in the culture of design, Bellini served as editor of *Domus* from 1985 to 1991 and as exhibition commissioner of the Triennale di Milano, and taught in Italy and abroad. He also created many other classics of Italian design, such as the *Bambole* series of sofas for BBB Italia, a successful example of modular furniture (1971–72); television sets for Brionvega; and lamps for Artemide and Flos. His designs earned him several Compasso d'Oro awards. At MoMA in 1972, he exhibited *Kar-a-Sutra*, a curious prototype of a mobile living unit, innovative but now lost. Bellini was a presence in the field of automotive design as well, designing for Renault, Fiat, and Lancia.

LEFT
399. Bertone, with Pininfarina
***Giulietta Spider* convertible**, 1957
Made by Alfa Romeo (Italy)

BELOW
400. **Advertisement for the Alfa Romeo *2500 Berlina Gran Turismo* and *1900 Berlina Monoscocco***, 1951
Private collection

OPPOSITE
401. Pinin Farina (1893–1966)
***Flaminia* coupé**, 1957
Made by Lancia (Italy)

FROM THE COACHBUILDER TO THE AUTOMOTIVE DESIGNER

Italian cars are objects on a human scale, especially compared to their large American cousins. They have their roots in the country's creative spirit and expert craftsmanship. Many Italian automakers have enjoyed continued success over the decades,[70] particularly the luxury brands, and Italian automotive designers have often been recruited by foreign marques. Take the case of Walter de Silva: After beginning his career with Fiat, he moved to Alfa Romeo in 1986, where he developed a number of innovative designs, such as the *156*, a 1998 model, and the *147*, a 2000 model. In 1999, he was recruited by the Volkswagen Group, and since 2007 he has been head of design for all seven of the company's brands.

We have already discussed Fiat, the Turin firm that made the automobile an everyday means of transportation in Italy. Another pioneering Italian marque from the same city is Lancia; founded in 1906 by Vincenzo Lancia, a race car driver and entrepreneur, it has always distinguished itself by its technological innovations.[71] The *Lambda* (1923) was the very first car to have a unibody construction, which the *Aprilia* (1937) would also have. Even after World War II, "modern" Lancias enjoyed great success, especially in motorsports. The *Delta Integrale* (1979), designed by Giorgetto Giugiaro, was a leading rally car, while the *Stratos* (1974), designed by Nuccio Bertone, was a standout on the track.

Bertone inherited the coachworks founded by his father in 1912 and built it into a leading automotive research center after World War II. The Bertone company designed production cars such as the Giulietta *Sprint* of 1954 (plate 399), as well as concept cars that represent most advanced expression of Italian style and technological innovation: among others, the Chevrolet *Corvair Testudo* (1963), the Alfa Romeo *Carabo* (1968), and the *ZER* (1994), which set the speed record for an electric car, reaching almost 189 miles per hour (303 km/h).

One legendary enterprise of the past should also be mentioned, that of Cesare Isotta and the Fraschini brothers. At the dawn of the twentieth century, they began to produce luxury automobiles in Milan under the Isotta Fraschini brand, including some of the most prestigious vehicles of their day, famous for being entirely handcrafted. The business had its highs and lows,

running into serious financial difficulties after each of the world wars, as many carmakers did. It later began to produce buses, whose bodies were designed by Ugo Zagato, the owner of a coachworks that had pioneered a lightweight, all-metal mode of construction.

However, not all Italian coachbuilders had adopted the latest technological innovations: in 1963, they produced only 43,000 of the million cars sold in Italy. Many could not withstand the competition, but others were able to reinvent themselves as consultants to major automakers, Italian or foreign. By the 1970s, the traditional figure of the coachbuilder had largely disappeared, to be replaced by that of the automotive designer, who conceived and built a prototype and also considered methods for manufacturing it, before entrusting its mass production to a larger firm.

Pinin Farina's coachworks was among those that were able to adapt with the times. His son Sergio took over the day-to-day operation of the firm in the 1950s.[72] Early in that decade, Pininfarina was still making only two car bodies per day, but it began to augment its expert craftsmanship with new technologies. An increase in production quickly resulted, and Pinin and Sergio grasped the full potential of the shift. They took a decisive step, building a large new factory in Grugliasco, on the outskirts of Turin. In this new facility, which opened in 1959, Pininfarina focused its efforts on a form of automotive design that took both aesthetics and aerodynamics into account. Particularly through its close collaboration with Ferrari, the firm would set the standard for sports cars and race cars.

As we have seen, Pininfarina already had the Cisitalia 202 (1947) to its credit. This small coupé, the first automobile to be exhibited at a museum (MoMA, in 1951), was considered the Trojan horse of the Italian style, because of the attention it attracted across Europe and in the U.S.. With the Lancia *Flaminia* (1957), Pininfarina created a body with sharp ridges and angles, and vast expanses of glass, all on coil springs (plate 401). This same line of development led to the *Spider Duetto*, designed for Alfa Romeo in 1966 and kept in production with slight variations until the early 1990s (plate 402). The firm continues to design production models, such as the Ferrari *575M Maranello* and the Ferrari *Enzo*, as well as one-of-a-kinds like the Ferrari *P4/5*.

But a broader range of products now bears the Pininfarina logo, from the torch for the Winter Olympic Games in Turin (2006) to the *Sirio* tram (2002, for AnsaldoBreda), a practical and functional mode of transportation, now in operation in many cities in Italy and elsewhere. Pininfarina also worked on the styling and aerodynamics of the *ETR 500* (1985), the first nontilting high-speed train made in Italy, developed by the TREVI consortium (TREno Veloce Italiano).[73]

Another automotive design firm that has worked on trains—specifically, their passenger compartments—is Italdesign, founded in Turin in 1968 by Giorgetto Giugiaro, with Luciano Bosio and Aldo Mantovani. Italdesign had a very specific objective: to provide carmakers with an integrated service that included not only the design of the vehicle, the production of the prototype, and the complete engineering of the project, but also a cost analysis and production schedule. Their first project was the Alfa Romeo *Alfasud*, which was produced in the factories of Pomigliana d'Arco (in the province of Naples), in order to aid the economic development of southern Italy. Immediately after, Italdesign began its long collaboration with the Volkswagen Group.

Since the 1970s, the studio has designed countless popular models for a number of brands, from the

Volkswagen *Golf* (1981) to the Fiat *Uno* (1983) and *Punto* (1993). One particular success was the Fiat *Panda* (1981), a versatile, inexpensive, and roomy city car that won the Compasso d'Oro (plate 404). Italdesign's extensive research efforts have also led to innovative concept cars, such as the Alfa Romeo *New York Taxi*, in which particular attention was paid to the relationship between the exterior dimensions and the interior capacity, and the *Capsula* (1982). The latter's fully equipped and autonomous chassis (which included the engine, transmission, fuel tank, spare tire, trunk, power brakes, radiator, and lights) could be adapted to a sedan, a pickup, a commercial van, an ambulance, or a tow truck. The sleek aerodynamic body of the *Brivido* touring car (2012), constructed in aluminum, carbon fiber, and glass, is painted in red Xirillac pearl to accentuate its sportiness. A special department, Giugiaro Design, was created in 1981 to extend the same integrated concept—"from the idea to the actual object"—to other areas of industrial design. Among this department's most recent projects, both large and small, are the interiors for the new *Alstom* train in Italy, the *Ultrac Vortic* and *Sportrac 5* tires for Vredestein, and the *Arco* line of ceramic cookware for TVS.[74]

Giugiaro was trained at Fiat's Centro Stile (established in 1958 under the direction of Dante Giacosa), as were many other designers, including Pio Manzù, who managed to carry out several influential projects before his untimely death in 1969, at the age of thirty.[75] A graduate of the Ulm HfG, where he also taught, Manzù came to prominence in 1962, when he won an international competition for a coupé body on an Austin Healey *100* chassis. He created the Fiat *127*, one of the first cars to come in two body styles, and worked on different aspects of Fiat's *City Taxi* concept car of 1968 (plate 403). He also organized the exhibition *The Lines of the Italian Car* (1967, San Marino), which traced the history of automobile design in Italy for the first time. Finally, he conceived of the famous *Parentesi* pendant lamp (Flos, 1970; plate 407), whose design was completed by Achille Castiglioni. This innovative lamp features a spotlight that slides and pivots on a steel cord between the floor and ceiling.

Alongside the entry-level models developed by established automakers, there is the unusual case of the very economical *Isetta*, which anticipated the *Smart* car. A tiny yet comfortable two-seater for city driving, it had an unusual configuration: riders entered the passenger compartment through a single door in front. Designed by Ermengildo Preti, an aeronautical engineer, for Iso Rivolta in Milan in 1953, the *Isetta* was not properly appreciated in Italy, where only twenty per day were built. In Germany, however, it was a remarkable success: it was produced by BMW at the rate of three hundred per day from 1955 to 1962 and came in a range of unusual colors, from apple green to fluorescent pink.

OPPOSITE
402. Pinin Farina (1893–1966)
***Spider Duetto* convertible**, 1966
Made by Alfa Romeo (Italy)

BELOW
403. Pio Manzù (1939–1969)
***City Taxi* concept car**, 1968
Made by Fiat (Italy)

BOTTOM
404. Giorgetto Giugiaro (b. 1938)
***Panda* city car**, 1981
Made by Fiat (Italy)

OPPOSITE
405. Gae Aulenti (1927–2012)
***Pipistrello* lamp**, 1965
Made by Luce Martinelli (Italy)
Lacquered aluminum, methacrylate, electrical components
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

BELOW
406. Ennio Lucini (1934–1997)
***Cespuglio* lamps**, 1969
Made by iGuzzini Illuminazione (Italy)
Plexiglas, electrical components

OTHER FIELDS OF DESIGN

Besides furniture and accessories, another well-known field of Italian design is lighting. After World War II, new materials such as methacrylate and plastics made it possible to develop lamps with novel forms, while advances in the technology of light sources impacted not only the aesthetics but also the ethos of lighting design, prompting Italian designers and entrepreneurs to "design for the future." The LED was about to cause a revolution in energy efficiency, and would also affect the style of many lamps, such as those created by C. De Bevilacqua for Artemide and Danese.

Fluorescent lights date to 1936 but did not enter the home until 1949, when Achille and Pier Giacomo Castiglioni used them in their *Tubino* lamp for Arredoluce (reissued by Flos in 1974), which extended the bulb's cylindrical shape to the entire metal frame. Forms grew increasingly diverse, encompassing pendant, wall-mounted, floor, and desk lamps, and even chair lamps, such as the *Libra-Lux* by Roberto Menghi (1948, Lamperti), which can balance on a soft armrest. Gino Sarfatti continued to design sculptural lamps for Arteluce,[76] such as the *Piedemolle* (1961). Then there was Artemide, founded by E. Gismondi and later joined by C. De Bevilacqua; and Flos, founded in Merano in 1962 to produce lamps in a plastic material called "cocoon."[77] The Castigliani brothers brought Flos to prominence (plate 410), but it was Sergio Gandini (and later his son Piero) who would become its soul. Based in Brescia, they sought out other famous names in Italy and abroad; for example, Philippe Starck designed the *Miss Sissi* lamp for Flos in 1991.

The Castiglioni brothers were more interested in the light source than its container, and made use of unusual components. Their *Tojo* (1962), for example, used a car headlight, a transformer, and a fishing pole, whose guides held the electrical wire. The aforementioned *Arco* (1962) is no mere lamp, but an archetype. Equipped with a marble base that provided a counterweight to the large stainless steel arc, and with an adjustable reflector in polished aluminum, it constituted an "independent light source." Under the name iGuzzini, the Guzzini brothers,[78] Adolfo and Giannunzio in particular, began producing indoor and outdoor lights—initially decorative, and later increasingly technical (plate 406). They often collaborated with architects on site-specific solutions, which they then adapted for industrial production. Examples include Renzo Piano's *Lingotto* (1993), designed for the exhibition center in Turin (in a former industrial space), and Gae Aulenti's lamps for the Palazzo Grassi in Venice, which were developed (with Piero Castiglioni) into the *Cestello* series of lighting arrays (1986).

Aulenti also designed the resolutely expressive *Pipistrello* ("Bat") (Martinelli, 1965; plate 405), while Mario Bellini created the anthropomorphic *Chiaro* lamp (Flos, 1967). Magistretti set to work as well, devising such lamps as the *Guione* (1970; plate 354) and the

LEFT
407. Pio Manzù (1939–1969) and Achille Castiglioni (1918–2002)
***Parentesi* light**, 1969
Made by Flos (Italy)
Stainless steel wire, rubber housing, metal base

BELOW
408. Paolo Rizzatto (b. 1941)
***Costanza* lamps**, 1986
Made by Luceplan (Italy)
Aluminum, polycarbonate

very successful *Eclisse*, a fixed spherical structure with a half-sphere pivoting inside it, allowing one to direct the light and regulate its intensity (1967, Artemide; plate 355). The designer of the first low-voltage halogen lamp (1970) was Joe Colombo. But the record for number produced must perhaps go to the *Tizio*, an articulated desk lamp with an innovative zoomorphic form, designed by Sapper (Artemide, 1972). Livio Castiglioni (assisted by his son Piero, who would carry on his father's legacy, thanks to his own creativity) tended increasingly to minimize the supporting structure of his lamps, to improve the performance of the light source. With Gianfranco Frattini, he created the entirely flexible *Boalum*, using a PVC tube (Artemide, 1971). Ettore Sottsass designed "fun" lamps for Memphis (the *Tahiti* and *Ashoka*, 1981), as did De Lucchi (the *Oceanic*, 1981). By contrast, Alberto Meda and Paolo Rizzatto's lamps are distinguished by their studied elegance and a constant attention to the light source, materials, and production techniques; in collaboration with Sandra Severi, they created many pieces for Luceplan (founded in 1979 by Gino Sarfatti's son Riccardo).[79] The *Costanza* (1986; plate 408), which revisited the traditional lamp shade, is a Rizzatto design, while the *Lola* lamp (1986; plate 409), whose name underscores its feminine lightness, was designed jointly by Meda and Rizzatto. Made of aluminum and carbon fiber, the *Lola* diffuses an intense and functional light, and its height can be adjusted by means of an extendable rod.[80] Meanwhile, Fontana Arte[81] followed its own path, working with a large number of designers, including Aulenti, Castiglioni, Sottsass, and Piano.

In the field of transport, Italy has made important contributions not only to automotive design but also to naval architecture.[82] Italy has a number of shipyards, and several of its architects have also designed watercraft, from the largest to the smallest. Many cruise ships produced in the shipyards of Genoa and Trieste are distinguished by their luxurious accommodations. The Riva motorboat, called "the Rolls-Royce of the sea," was famous on the French Riviera in the mid-1950s and is still built on Lake Iseo. Its production is industrial in scale (between 1950 and 1970, four thousand Rivas were launched), but also of high quality: even into the postwar era, these luxury items were crafted by hand. Giorgio Barilanni designed one of Riva's most iconic models, the *Aquarama*, an eight-person boat measuring 26 feet 4 inches by 8 feet 7 inches (8.02 by 2.62 m). It has been in production since 1962, and is still made of varnished mahogany. Carlo Pagani, who breathed new life into the Milan department store La Rinascente after World War II, was responsible for its interior. Wood eventually gave way to fiberglass: Carlo Riva, who represented the third generation of the firm, was the first boatbuilder in Italy to use that material, in 1970.

In certain respects, Riva's boats came as a response to those of Baglietto (established in Varazze, Liguria), which were built to order, barely a few hundred per year. Baglietto's first shipyard opened its doors in 1854, in a garden shed a hundred yards from the sea. There the founder, Pietro Baglietto, started out building small

LEFT
409. Alberto Meda (b. 1945) and Paolo Rizzatto (b. 1941)
***Lola* lamp**, 1986
Made by Luceplan (Italy)
Carbon fiber, steel sheet
Musée des Arts Décoratifs, Paris

OVERLEAF
410. Achille Castiglioni (1918–2002)
***Taraxacum 88* pendant lamp**, 1988
Made by Flos (Italy)
Aluminum, 60 bulbs
Centre National des Arts Plastiques/Fonds National d'Art Contemporain, Paris

PAGE 331
411. Paolo Ulian (b. 1961) and Giuseppe Ulian (b. 1959)
***Anemone* lamp**, 1998
Bic pens, bulb

fishing boats, but he quickly turned to pleasure craft and yachts. And though Baglietto is certainly a historic shipyard,[83] today the Italian naval architect par excellence is Andrea Vallicelli, whose name remains inextricably linked to that of the *Azzurra*, the very first Italian boat to participate in the America's Cup, in 1983.

A few significant achievements in the field of industrial design should also be mentioned. We have already alluded to the case of Olivetti, whose history encompasses not only that of the firm itself, founded in 1908, but also that of the Piedmontese city of Ivrea, and of the enlightened family that gave the firm its name. In 1932, Olivetti introduced its first portable typewriter, whose case was designed by the engineer Aldo Magnelli with advice from his painter brother Alberto. In 1935, Adriano Olivetti, son of founder Camillo, reshaped almost the entire city of Ivrea in the name of modernity, to respond to new needs inside and outside the factory. Even today, the urban center of Ivrea is an open-air museum of architecture.[84] In seeking out artists and architects with a social conscience, he opened the way for a new relationship between technology and humanist culture. He was responsible for the very thoughtful review published by the Olivetti company and for the founding of the Comunità movement (1946), whose objective was to disseminate a distinctive industrial culture. The architects Figini and Pollini were joined by Xanti Schawinsky, a Swiss visual designer and photographer trained at the Bauhaus. While working on the *Studio 42* typewriter (1935), he enlisted the services of Nizzoli, who created his first product for Olivetti in 1940, the *Multisumma*, which was followed by the *Lettera 22* (1950), the quintessential portable typewriter.

In the following years, Olivetti remained the leader in its sector, while also entering the promising new field of electronics. Sottsass's and Hans von Klier's designs for the company were the emblem of future possibilities, to which, oddly enough, most of Italian industry paid little attention. Nevertheless, in terms of its design, the *Elea 9003* computer anticipated concepts that only the great science fiction films were depicting at the time (Stanley Kubrick's *2001: A Space Odyssey* of 1968, for example). As Sottsass himself recalled in 1993: "I imagined . . . black metal structures enclosed in sheets of aluminum plate . . . then, ultimately, these cases, once assembled, would become a sort of absolutely mysterious silver architecture, because you would see nothing there but a monolith of shining, metaphysical metal, a sort of maleficent, or at least impenetrable, god." An utterly cosmic image, worthy of a great visionary—as that artist-designer-architect has always been.

The landmark, albeit brief, history of Brionvega and its electronics has already been mentioned. But Brionvega was also important in another sector, one that has recently been undermined by outsourcing but was once a real focus of innovation in Italy, namely, that of white goods. This term[85] encompasses all kitchen appliances—from the refrigerator to the dishwasher, stove, and exhaust hood, as well as the washing machine. Ventures such as Candy, Indesit, Ariston, Merloni, and

RIGHT
412. Marco Zanuso (1916–2001)
***Ariante* portable table fan**, 1973
Made by Vortice (Italy)
Unbreakable plastic, electrical components
Museum of Modern Art, New York

OPPOSITE
413. Roberto Pezzetta (b. 1946)
***OZ* refrigerator**, 1998
Made by Zanussi (Italy)
Musée National d'Art Moderne, Centre Georges Pompidou, Paris

Zerowatt made design the leading edge of their production. By 1995, Italy had become virtually the appliance factory for the European continent: nearly half of all white goods were made in the country. This great undertaking, which began after World War II, grew up among established machine shops that understood the new possibilities of industrial design. In 1947, the Fumagalli brothers exhibited the first washing machine made in Italy at the Milan Trade Fair. (It was called "Candy," after the American tune by that name).

Several other young entrepreneurs, with the assistance of the Centri Stile Interni, also developed products that went on to conquer the European market. The business daily *Il Sole 24 Ore* wrote in the 1960s that "household appliances are to Italy what watches are to Switzerland." And the *Financial Times* would even go so far as to compare the perfection of these two characteristic national products.

Thus arose an industry that responded to the need to mechanize the home, to provide it with "household helpers" that were durable, functional, aesthetically pleasing, and less expensive than those of foreign brands. The refrigerator, for example, was entirely reinvented, thanks to the use of plastics: all its internal surfaces were molded in ABS (plate 413). Zanuso (who also designed small household appliances), Gino Valle, and Luigi Spadolino were among the first designers to enter this sector.

In the Marches, Elica, a manufacturer of exhaust hoods, used design to add a new élan to its products in the early twenty-first century: Gaetano Pesce contributed a "hood sculpture" decorated with fruits and vegetables. Elica found a precedent in the Milanese company Vortice, established by Attilio Pagani in the 1950s, which produced air purifiers and took its name from its first product. (Zanuso would later work with Vortice; plate 412.)

The contributions of Italian design to the sporting equipment sector[86]—where performance is always a high priority—are perhaps less well-known, but significant nevertheless. They include bicycles, from Bianchi to Cinelli, and also motorcycles. Some of the most notable recent bicycles have been designed by Alessandra Cusatelli, but Rinaldo Donzelli's *Graziella* is also worthy of mention. Produced by Carnielli from 1963 on, it solved the problem of the folding bike for city use and, indeed, became the quintessential example of that type. To mention only two motorcycle companies: Ducati, founded in Bologna in 1926, is "the builder of sports motorcycles par excellence," and Gilera, founded in Milan in 1909, is the oldest brand of Italian motorcycles still in production. The races these firms organized were an effective public relations instrument, of course, and a valuable tool for developing new production models.[87]

Some designers have created sporting equipment for people with limited mobility. For example, the Turin designer-entrepreneur Danilo Ragona drew on his personal history to improve the lives of the disabled. Under the Able to Enjoy brand, he has produced innovative ultralight wheelchairs made of light and versatile carbon fiber, which allow their users to engage in sports from tennis to handball. With the support of Pininfarina Extra, he also developed the *Monoski* (2008) for disabled skiers.

Technogym, founded by Nerio Alessandri in Cesena (Romagna) in 1987, manufactures equipment for athletes in training, as well as people who simply want to stay in shape. Since 1996, it has been the official supplier of the training centers for the Olympic Games. A mechanical engineer who loves motors, Alessandri began by designing machines for his own workouts, but now relies on medical, scientific, and technological research—and on design. In the company's research center, the designer Antonio Citterio has created equipment for both fitness clubs and individuals. His *Kinesis* (2008), for example, accommodates more than two hundred fitness exercises.

The quest for physical well-being, and the popularity of the Mediterranean diet, has also given rise to "food design." This trend has manifested itself in the many products for the kitchen designed by Fratelli Guzzini and Alessi. In this connection, we may recall that, back in 1933, the very first espresso machine was invented on the banks of Lake Orta (Piedmont), with an aluminum boiler and a one-of-a-kind multifaceted shape. It would adopt an octagonal silhouette in the 1950s but retain the same icon: Signore Bialetti, a little man in a mustache. In Italy, it would replace the traditional Neopolitan coffeemaker.

RIGHT
414. **Display of prototypes and models at the Alessi Museum in Crusinallo, Italy**

OPPOSITE
415. **Alessi factory and museum in Crusinallo, Italy**

A NEW CENTURY

And so we arrive at the dawn of the twenty-first century. During the last years of the twentieth, individuality assumed an increasingly important place, and traditional design, which respects the technical, functional, and ergonomic values of the product, enjoyed a resurgence. But while products have become increasingly diversified, no real stylistic revolution seems to have occurred. Some have spoken of *Design povero*, linking design to experiments in conceptual art. In practice, this term is primarily used to refer to a type of design that privileges humble materials, such as recycled paper, and combines objects at hand to create others with different functions. This current has an illustrious precedent in Mari's *Metamobile* (Gavina, 1976).[88] In 1974, others began to use the expression "neo-minimalism" to refer to a nascent trend toward simplicity, in reaction to the exuberance of form in the previous decade. Naturalness, lightness, and sobriety mark that approach, which targets formal more than functional aspects. Consider the approach of the designer-manufacturer (a combination that is not unusual in Italy) Giulio Cappellini, who revived the old family business by acquainting the Italians with the creations of young international designers, from Jasper Morrison (his *Thinking Man's Chair* of 1988, in lacquered metal) to Tom Dixon (his *S Chair* of 1989, with its lithe silhouette).

In the late 1980s, a number of other Italian manufacturers also opened their doors to foreign designers from throughout Europe and across the Atlantic. This is another distinctive feature of Italian design culture and of the country's industrial sector, which is composed of small firms concentrated in particular areas. These flexible businesses are able to express the very essence of Italian taste and the art of living, which is highly attractive to foreign designers—as is the network of relationships provided by a city such as Milan.

Just as Bertone, Giugiaro, Pininfarina, and others were engaged by foreign companies, many foreign designers came to work in Italy, where they discovered their chosen homeland. Andries Van Onck from the Netherlands, for example, worked for Olivetti beginning in 1957, and later became an independent designer in Milan. The Japanese designer Isao Hosoe has lived in Italy since 1967, working first with Ponti and Rosselli;[89] and Hosoe's countryman Makio Hasuike ran his own studio in Italy beginning in 1968, and in 1982 founded Mh Way, which produces bags and desk accessories.

Italian entrepreneurs are always attentive to new discoveries in design and to the emergence of new design "stars," while realizing that it takes time for a designer's image to attach itself to his or her works. Moreover, they are careful to preserve the cultural identity of the products that foreign designers create for them. Alessi, Driade, Flos, and Magis (a northeast Italian company founded by Eugenio Perazza in

1976, which functions as a sort of international laboratory that anticipates future trends) were among the first Italian companies to seek out foreign designers. Philippe Starck,[90] for example, has a strong presence in Italy, thanks to his playful products: he designed the *Costes* chair for Aleph (1981); the *Arà* table lamp, with its distinctive horn shape, for Flos (1988); and the more provocative *Gun* table lamp, with its shaft in the shape of a gold pistol, also for Flos (2005). In the late 1980s, Kartell commissioned the *Dr. Glob* chair (1988–89), among other projects, from Starck, and in 1990 Alessi invited him to reconceive one of its classic pieces, a stainless steel tray. And, if we are to believe the legend, shortly thereafter Starck sent in a paper napkin containing a sketch for the *Juicy Salif* citrus squeezer, one of the company's best sellers, which, even beyond its practical utility, is a real conversation piece. Recently, Alessi has also turned to Asian design, commissioning eight architects from China to design trays and containers (the firm's most typical products), in an explicit confrontation between East and West.

In 1994, the Israeli Ron Arad, also attracted by the presence of artisans and manufacturers who know the value of design, opened a studio along the lakefront of Como. For Kartell, he designed the *Bookworm*, a flexible bookcase that unrolls along the wall (1995). Alessi, Cappellini, Magis, and Driade assigned him several design projects, which he always realized with his signature spirals and curves. More recently, after working with Castiglioni and Magistretti, the Spaniard Patricia Urquiola settled in Milan. In 1998, with Patrizia Moroso—who worked in her family's furniture factory, founded in the early 1950s—Urquiola undertook a new approach to the chair: casual, flexible, convertible. The Moroso factory is located in Friuli, a border region where Manzano chairs have been produced for more than a hundred years. In that productive triangle, little known to the general public, anonymous skilled craftsmen have produced millions of chairs in their shops over the generations. These chairs are exported worldwide under the brand names of illustrious American, German, or French enterprises. Today, the Friulian

furniture makers are facing a full-blown crisis, because of the outsourcing of production to low-cost factories in Asia. Only those that have invested in design are still hanging on: Moroso[91] of course, but also Gervasoni,[92] which is in its third generation.

As for the other characteristics of Italian design and production in recent years, we lack the historical distance needed to assess them critically. However, at least one of the many paradoxes of Italian design seems to have been resolved, namely, the absence of schools of design. Before the 1990s, there were no schools or departments devoted specifically to design in the Italian universities, nor even courses in design. Until then, only the ambiguously named ISIAs (Higher Institutes for Artistic Industry), founded in the 1970s in Rome, Florence, Urbino, and Faenza, offered public education in design. Many who are now recognized designers came out of these institutions: for example, Paolo and Giuseppe Ulian, who, through a skillful recycling of rubbish, an intelligent approach to construction, and an ethical view of the product, were able to propose a new type of design inspired by consumer behavior. Examples of their work include the *Mat Walk* bath mat (2001) or the *Anemone* lamp, made of Bic pens (1998; plate 411).

During the entire second half of the twentieth century, the training of designers took place exclusively in private schools (with the exception of certain courses offered in schools of architecture and, later, academies of fine art). In Milan, the Società Umanitaria, a nineteenth-century institution, created a school of design in 1953 with the help of the visual designer Albe Steiner, following the model of the Ulm HfG. In 1954, Nino Di Salvatore opened the Scuola Politecnica di Design, first in Novare, then in Milan, employing both Munari and Huber as instructors. There are also two international institutions on Italian soil: the Istituto Europeo di Design (IED), active since 1966 and with branches throughout Europe and Latin America; and the Nuova Accademia di Belle Arti (NABA), which was founded in 1980 in response to the deficiencies in Italian academies of fine arts. NABA has become a training center for careers in design, fashion, and communications. And, finally, one postgraduate course: the Domus Academy, created in 1983 at the initiative of Maria Grazia Mazzocchi, with the support of Mendini, who was editor of *Domus* at the time. The establishment of the Domus Academy attested to a growing awareness of the importance of Italian design, and to a desire to teach the Italian mode of industrial creativity.

In the 1990s, as private schools continued to multiply, and not only in Milan, drawing in a flood of foreign students, Italian design was finally institutionalized in the universities. Various departments began to offer courses that would develop, over the years, into schools of design with complete degree programs (for the bachelor's, the master's, and the doctorate). In 1993, the Politecnico di Milano underwent such a transformation, with the school of design taking its place beside

OPPOSITE
416. Antonio Citterio (b. 1950) and Toan Nguyen (b. 1969)
***Kelvin LED* desk lamp**, 2009
Made by Flos (Italy)
Aluminum, LEDs

BELOW
417. Claudia Raimondo (b. 1957)
***Joy no. 1* centerpiece bowl**, 2013
Made by Alessi (Italy)
Stainless steel

those of engineering and architecture. Meanwhile, in Venice, the Istituto Universitario di Architettura di Venezia (IUAV) created a school of arts and design. In Turin, Genoa, Florence, Camerino (Macerata), Rome, Naples, and Palermo, courses in design are offered in the architecture schools. And in the last ten years, the Libera Università di Bolzano has established a trilingual school of arts and design.

Italy also lacked a museum that could display the history of industrial design. In the early 1950s, Ponti developed a plan for such an institution, which he wanted to install within the Museo della Scienza e della Tecnologia in Milan. In the end, a large space designed by Michele De Lucchi in the Palazzo dell'Arte was devoted to industrial design. The roots of this endeavor lay with the Triennale, although it must be said that this event has changed profoundly in the last two decades. Ever since it broadened its range of activities to include research and documentation (1990), it has hosted exhibitions covering everything from architecture to fashion. The themes of the Triennales have also become much more heterogeneous since the 1970s, and design no longer plays the starring role.

The Triennale Design Museum, which opened in December 2007, is characterized by its dynamism and its capacity for innovation. The first exhibitions were conceived by Andrea Branzi. To respond to the question "What is Italian design?" he displayed *The Seven Obsessions of Italian Design* (2007–8), attempting to outline the shape of a culture that has taken on the contemporary world while cultivating a close relationship with ancient history and tradition. In *The Dream Factories: Men, Ideas, Ventures, and Paradoxes of Italian Design*, Alberto Alessi told the stories of businesses large and small, which in Italy are closely linked to the biographies of their founders.

For the last fifteen years or so, the theme of memory—a valuable tool for consciously projecting oneself into the future—has been addressed by many design firms. They have made an effort to organize their archives and collections, knowing that their history and identity represent an important aspect of Italian design and entrepreneurial culture (plates 414, 415).[93]

The "culture of design" has become a focus of growing interest, and design has become a social phenomenon even outside Milan, although that city remains the historic center of gravity for its development. The Association for Industrial Design, which has its headquarters in Milan, has been overhauled and is now subdivided into thirteen territorial delegations. It has assembled a collection that includes almost all the three hundred design products awarded the Compasso d'Oro since the creation of the prize fifty years ago, as well as the two thousand that received an honorable mention. The Ministry of Culture has declared this collection, managed by a foundation created in 2001, to be of "extraordinary historical and artistic interest."

For Milan (if not Italy as a whole), the coming years will no doubt confirm the city's innate capacity to influence taste and to cast its spell, as already suggested by its system of international *saloni*. The traditional Milan furniture fair now coexists with events dedicated to different types of design, for the office, lighting, construction, the kitchen, and the bathroom. These exhibitions are a landmark of urban culture in its broad sense, and now the model has been expanded to Turin, which the International Council of Societies of Industrial Design designated the "world capital of design" in 2008.