



ART DECO NEW YORK

JOURNAL OF THE ART DECO SOCIETY OF NEW YORK

WINTER 2021

VOLUME 6, ISSUE 1

INNOVATION OF THE INTERWAR PERIOD

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PRESIDENT'S MESSAGE

Dear Deco Friends,

It gives me great pleasure and pride to share with you the 2021 issue of *Art Deco New York*, which highlights many important innovations of the interwar period that so dramatically shaped the architecture, design, and culture of the 1920s and 30s that we continue to celebrate today.

A hundred years ago, as the world emerged from a war and global pandemic, a period of dramatic technological change transformed all aspects of life—how and where people lived, worked, traveled, sought entertainment, pursued happiness, and more. A century later, we find ourselves at an all too eerie, similar point of reshaping aspects of everyday life, questioning what is important and what gives our lives meaning and pleasure.

This issue of *Art Deco New York* looks at many of the societal, technological, and artistic changes that transformed the interwar years and led to the creation of Art Deco masterpieces and the spirited Jazz Age lifestyle. As we move to emerge from the challenges of the last two years, we can hope that the promise of an equally energizing new period of inspiration and celebration awaits.

As always, the journal is the culmination of an effort that began in January, while the city was still in the darkest days of the pandemic. Our mostly volunteer team met online to decide if undertaking this effort under those circumstances was madness. We agreed it was, but we decided to do it anyway. So, as we often do, we plunged in—and we are all so glad we did!

This issue would not have been possible without the tireless dedication of ADSNY's passionate, professional volunteer team. Working remotely, under uniquely challenging circumstances, they made magic happen. I send my heartfelt thanks to all the writers who made time to share with us their scholarship and enthusiasm; to our editors Alma Kadragic, Diane Nottle, Peter Singer, and Sandra Tansky, who managed to work together while apart, to present this polished, thought-provoking volume; to Richard Berenholtz, Sawani Chaudhary, and Andrew Garn, for their striking photography of New York City's Deco gems; to Meghan Weatherby, for her beautiful design; to Board member Stephen Van Dyk for inviting so many outstanding authors to share their knowledge with us; and to ADSNY Vice-President, Anthony W. Robins for being there to lend a hand. I am very grateful to this mighty team for their generous help in making this issue a reality.

We hope you will enjoy their efforts and the variety of engaging articles in this issue. We are especially delighted that after the height of the pandemic, we can once again offer the *Art Deco New York* journal to our readers.

All our good wishes to you and your loved ones for a safe, happy and much better 2022!



Roberta Nusim, President

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WHAT IS ART DECO?

BY DEVON CARAHER

At its most elemental, the Art Deco design movement is a study in contrasts. It is often angular and geometric, but sometimes soft and curved. It is opaque but also transparent; shiny yet matte; monochrome and polychrome; Western and non-Western; an echo of the past while being fully in the present. When considering the style through my particular lens as a jewelry historian and gemologist, Art Deco is synonymous with baguette-cut diamonds, carved gemstones, frosted rock crystal, and brushed chromium. Such distinct materials and diverse techniques hark back to a style that evolved considerably, and broadly, throughout the 1920s and 1930s, and continues to remain relevant and fashionable today.

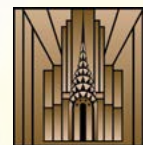
The global debut of the Art Deco style at the 1925 Exposition internationale des arts décoratifs et industriels modernes introduced a form of ornamentation shaped by early twentieth-century cultural events. Most notably, World War I set in motion permanent and profound changes in the role—and dress—of women. As women's sartorial styles became more masculine (i.e., practical and functional), adornment became an indispensable accoutrement that helped soften and feminize an increasing androgynous “La Garçonne” look. Flexible strap bracelets, for instance, were worn in profusion on bare arms. Double-clip brooches were affixed to loosely worn frocks. Sautoir necklaces casually dangled down necks and otherwise bare backs. Elegant pendant earrings punctuated short haircuts. The play between jewelry (feminine) and costume (masculine) embodies the harmonious combination of opposing elements inherent in Art Deco. I find these elements, and the movement's cultural significance, cemented by its enduring modernity, best illustrated—and celebrated—in jewelry from that timeless period in design.

The chromatic contrasts for which the Deco style is arguably best known evolved from variations of black and white (frequently rendered in diamond, onyx, and platinum), to more unexpected color combinations, such as black (onyx) with orange (coral) and green (jade). Serge Diaghilev's *Ballets Russes*, which debuted in Europe in 1908, quite literally set the stage for these shocking and striking color combinations. It also paved the way for infusing Western and non-Western sources as inspiration for original works of art. Cartier sourced colored, carved gemstones from India, mounted them in platinum, and introduced the pieces into eighteenth-century French design. These creations

became known as Tutti Frutti jewelry, which is considered Cartier's most significant contribution to the Art Deco era. While the vibrant and polychromatic color combinations of Tutti Frutti pieces fit well within the Art Deco vernacular, the forms of the designs departed from the precise and angular geometry for which the movement is traditionally known. But Cartier did more than combine decorative styles and precious gemstones when crafting Tutti Frutti; the jeweler blended Eastern and Western influences—the exotic with the modern—to create extraordinary works of art. The result was radically innovative at the time, and the technique of creating a striking surface remains modern to this day. The same is true of the Egyptian Revival strap bracelets Van Cleef & Arpels helped popularize in the mid-1920s. Using brilliantly colored and cut gemstones, Van Cleef & Arpels rendered—and simultaneously de-contextualized—ancient Egyptian iconography and hieroglyphics onto new jewelry forms. Likewise, Boucheron used African materials, and the influence of African ornamentation, to compose arresting motifs. Not only did Boucheron's designs deviate from Art Deco's characteristically straight line and precise geometry, but they also provided commentary on the richness of culture and materials found in former French colonies.

While precision is unquestionably characteristic of the Art Deco style, a single characteristic is simply not enough to define an enduring style. Angularity does not equate with eternal modernity. As such, the elongated baguette-cut is not Art Deco alone. But when applied to a surface in an unexpected way and done so in contrast to other stones (i.e., paired with its polar opposite, the circular cut), there you have it. The play of light it achieves is sublime. It is another example of the design movement's study in contrasts and striking surface effects achieved through color, line, and texture, that not only capture the eye but surprise and delight it as well. In the end, Art Deco isn't any one design or designer. More than any singular style, technique or form, Art Deco is a modern spirit that persists.

Devon Caraher holds a BA in History and Italian Studies, an MA in the History of Decorative Arts and Design from the Parsons School of Design (in conjunction with the Cooper-Hewitt, Smithsonian Design Museum) and a Graduate Diamond and Colored Gemstones Degree from the Gemology Institute of America. She is currently a lecturer at the Parsons School of Design where she teaches classes on the history of jewelry. She also serves on the Board of the Art Deco Society of New York and is an active member of the American Society of Jewelry Historians and the Association for the Study of Jewelry and Related Arts. She is the founder of dbc.nyc.



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Front Cover Chrysler Building entrance showing new, innovative materials developed during the period. Photo: Meghan Weatherby

This issue is dedicated to the memory of longtime ADSNY supporter, writer Polly Guerin.

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SHIMMER AND SHINE: CUTTING-EDGE MATERIALS WITH ART DECO PIZZAZZ

BY KATHLEEN MURPHY SKOLNIK

Many of the glamorous, exuberant buildings of the Art Deco era owe their smooth, sleek, shiny façades and shimmering ornamentation to innovative building materials introduced in the early twentieth century. Novel steel alloys, such as nickel silver, monel, Nirosta, and duralumin, and creative new glass products, including pigmented structural glass and glass block, were among the technological advances that made architecture of the 1920s and 30s in New York, as well as other parts of the country, shimmer and shine.

Nickel Silver

Nickel silver is something of an oxymoron. These copper-nickel-zinc alloys contain no silver and relatively low percentages of nickel. Nickel silver's origins go back to seventeenth century China, where it was more accurately labeled *pek* meaning white and *tung* meaning copper. Also known as white brass and German silver, nickel silver became popular in the United States in the 1920s as a less expensive alternative to silver for decorative grilles and panels, railings, and elevator doors.

Nickel silver's resistance to corrosion and elegant silvery-white appearance were among the desirable attributes that made it so sought-after for architectural applications. The copper content, which typically ranged from 60% to 75%, accounted for its anti-corrosive properties, and the presence of 5% to 20% nickel provided its visual appeal. Zinc, which made up another 5% to 20%, lowered the melting point and enhanced its strength.

The original City Bank-Farmers Trust Company Building at 20 Exchange Place in lower Manhattan, an especially outstanding illustration of nickel silver's decorative potential, is said to represent the alloy's first extensive architectural use. The nickel silver panels on the curved center doors of the entrance at William Street and Exchange Place depict historical methods of transportation, including sailing ships, hot air balloons, and steam locomotives. Modern means of transportation—airplanes, ocean liners, and diesel engines—appear on the flat side doors. Nickel silver panels above the doors frame allegorical bronze figures symbolizing banking and abundance, surrounded by animal and floral motifs.

The Hanover Street entrance doors repeat the transportation motifs found at William Street and Exchange Place, but the nickel silver grilles above the doors contain two *caducei*, the ancient Greek symbols of commerce, rather than allegorical figures.



LEFT: The nickel silver doors, grilles, and details of the City Bank-Farmers Trust Company Building entrance at William Street and Exchange Place. Photo: Sawani Chaudhary

MIDDLE: Detail of the curved nickel silver center doors of the City Bank-Farmers Trust Company Building depicting historical methods of transportation, including sailing ships, hot air balloons, and steam locomotives. Photo: Meghan Weatherby

RIGHT: Detail of nickel silver panels above the entrance to the City Bank-Farmers Trust Company Building featuring an allegorical bronze figure symbolizing abundance, surrounded by animal and floral motifs. Photo: Meghan Weatherby



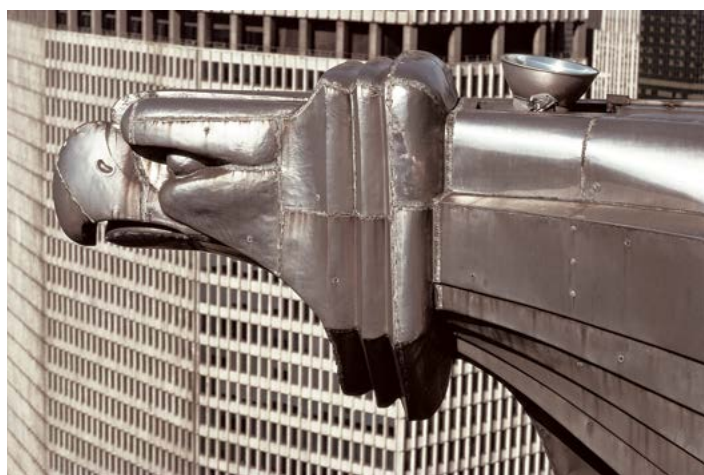
LEFT: Nirosta crown of the Chrysler Building with its seven concentric ribbed steel arches set with triangular windows. Photo: Richard Berenholtz



TOP MIDDLE: Detail of the stylized Nirosta Chrysler automobile radiator caps at the thirty-first level of the Chrysler Building. Photo: Richard Berenholtz



TOP RIGHT: Detail of the stylized Nirosta pineapple urn at the twenty-fourth floor of the Chrysler Building. Photo: Sawani Chaudhary



BOTTOM RIGHT: Detail of the stylized Nirosta gargoyles in the form of eagle heads at the sixty-first floor of the Chrysler Building. Photo: Richard Berenholtz

Nirosta

Corrosion-resistance also accounted for the desirability of Nirosta, a metal alloy developed in Germany by the Krupp firm in the early twentieth century. The trade name is a German acronym for *nichtrostender stahl*, meaning non-rusting steel. Nirosta steel contains approximately 18% chromium, which conveys its anti-corrosive properties.

The most prominent example of Nirosta's architectural use in New York is the iconic Chrysler Building. The tower's glistening crown, with its seven concentric ribbed steel arches set with triangular windows, is clad entirely in approximately 4,500 plates of Nirosta. A "glittering spire of Nirosta," as a 1930 issue of *Fortune* phrased it, tops the structure. The ornamentation at the building's setbacks—the stylized pineapple urns at the twenty-fourth floor, the Chrysler radiator caps at the thirty-first level, and the Art Deco gargoyles in the form of eagle head hood ornaments at the sixty-first floor—are also Nirosta.

The architect, William van Alen, described the merits of his use of Nirosta in the Chrysler Building in the 1933 and 1935 editions of Ernest E. Thum's *The*

Book of Stainless Steels: "The use of permanently bright metal was of greatest aid in the carrying of rising lines and the diminishing circular forms of the roof treatment, so as to accentuate the gradual upward swing until it literally dissolves into the sky." He went on to explain the effect of light on the mirrored surfaces: "The splays get black and then brighter as the light reflexes occur, or the position of the observer changes, so that the entire building is changeable, like a brilliant piece of silk waving in the wind."

In 1929 the American Society for Testing Materials committee on stainless steel selected the Chrysler Building to evaluate Nirosta's durability for architectural applications. The building's Nirosta sheets were inspected every five years until 1960, when the evaluations ceased because of the virtual lack of deterioration detected over the previous three decades.

Monel

Monel—a product of the International Nickel Company, consisting of approximately two-thirds nickel and one-third copper—was another corrosion-resistant alloy popular during the Art Deco era. It was named for the company's president, Ambrose

Monell, but the final L was dropped because family names could not be used as trademarks. An early architectural use of monel in New York was the roof of Pennsylvania Station, installed in 1909. In 1936 monel replaced the copper roof on the New York Public Library at Fifth Avenue and 42nd Street.

But monel also had decorative applications. As stated in a manual for architects and metal craftsmen issued by International Nickel, "Monel Metal may be forged to create patterns which in earlier periods could be developed only in wrought iron, with a resulting brilliance and crispness to the work which exceeds the beauty of the inferior metal."

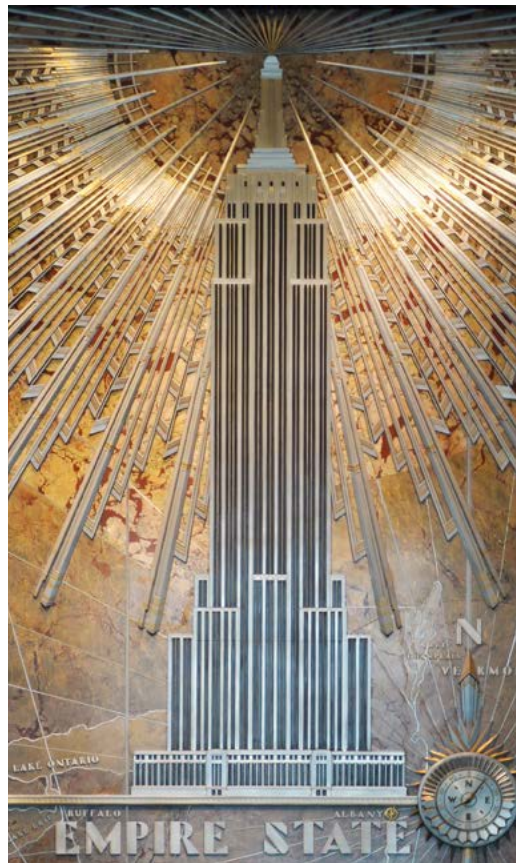
A prime example is the monel entrance gate of the five-story Art Deco townhouse at 49 East 80th Street that the architect Harry Allan Jacobs designed for Lionello Perera in 1930. As Jacobs told *The New York Times*, the house reflected "a modernistic spirit in decorations as well as in materials, as representative of this materialistic, artificial, and practical age." The monel grille at the entrance is covered with an intricate geometric pattern that includes wavelike forms and graceful scrolls. Jacobs also selected monel for the elegant curved railing of the interior staircase with abstract geometric designs that connects the first four levels of the residence. In later years, Barbra Streisand owned the Perera house for a time.

Duralumin

Duralumin is an aluminum alloy containing approximately 4% copper and a smaller amount of manganese that was developed by Dürener Metallwerke AG in Düren, Germany, in the first decade of the twentieth century. The name is a combination of Dürener and aluminum. Although it is not corrosion-resistant, duralumin is strong, hard, and lightweight; it was widely used for industrial applications, especially aircraft construction. It was also adopted for decorative metalwork during the Art Deco era.

The most notable examples of its decorative use in New York are found in Shreve, Lamb, & Harmon's Empire State Building of 1931. The metal silhouette of the building that embellishes the back wall of the lobby was cast in duralumin by the skilled German-born metal designer and fabricator Oscar Bach. The light rays extending from the top of the building's image and the outlines representing the boundaries of New York and neighboring states in the background map were also fabricated from duralumin.

In addition, circular duralumin medallions ringing the lobby pay homage to 12 crafts and industries that contributed to the building's creation: elevators, decoration, masonry, metals, stone, heating, concrete, machines, carpentry, excavation, plumbing, and steel.



TOP LEFT: Perera house, New York City's only Art Deco townhouse. Photo: Sawani Chaudhary

TOP RIGHT: Monel entrance gate of Perera house. Photo: Sawani Chaudhary

MIDDLE: Three of the twelve circular duralumin medallions ringing the lobby of the Empire State Building, which pay homage to crafts and industries that contributed to the building's creation. Photo: Sawani Chaudhary

BOTTOM: The cast duralumin silhouette of the Empire State Building that embellishes the back wall of the lobby by German-born metal designer and fabricator Oscar Bach. Photo: Meghan Weatherby

Duralumin medallions similar to those found in the Empire State Building adorn the façade of the New York City Health Department Building at 125 Worth Street in lower Manhattan, although here the metal plaques are octagonal rather than circular. Designed by the architect Charles B. Meyers in a “conservatively classic” style, the Health Department Building was completed in the early 1930s. The medallions, designed and fabricated by Bach, are located between the third and fourth stories on each of the building’s four façades. Although untitled, the images appear to relate to the building’s function. Medical imagery includes a man mixing a potion in a bowl, a woman examining a child’s knee, and a man performing an experiment on a laboratory rat in a cage. In others, a man fills a bowl with water and a woman sits under the sun, perhaps a reference to the health benefits of clean water and sunlight. The images of men reaping grain and catching fish suggest the value of a healthy diet; a woman washing clothing in a fountain and a man shoveling trash into a furnace stress the importance of cleanliness and sanitation.

Pigmented Structural Glass

Pigmented structural glass made its debut in the early years of the twentieth century. A combination of borax, cryolite, kaolinite, manganese, silica, feldspar, and fluorspar made it opaque. Structural glass was billed as an inexpensive substitute for marble, although the fusion of the components at a high temperature, followed by a lengthy annealing process, made it even stronger than marble. It was impervious to moisture, easy to clean, and simple to install.

The first such product, Sani Onyx, was introduced by the Marietta Manufacturing Company of Indianapolis in 1900. Sani Onyx was subsequently joined by similar products, such as Carrara glass from the Penn-American Plate Glass Company, named for the Italian quarries known for fine white marble, and

vitrolite, originally produced by the Vitrolite Company, which was later acquired by the Owens-Illinois Glass Company.

The first large-scale architectural application of pigmented structural glass came in the early teens when Cass Gilbert covered the restroom walls in New York’s Woolworth Building with Carrara glass. By the 1920s the use of these products had extended to lobbies and storefronts. Because of its ability to be curved and its availability in a number of colors and finishes, structural glass was an ideal cladding material for the Streamline Moderne architecture introduced in the 1930s.

The use of pigmented structural glass for remodeling storefronts received a boost from the 1935 Modernize Main Street competition sponsored by *Architectural Record* and the Libby-Owens-Ford Glass Company. As stated in the jury’s report, “The major objective of the competition was to create designs for remodeling stores which would ‘attract the public, display goods to the best advantage, and provide space, convenience, and light so that purchasing is a pleasure.’ ” The competition offered \$11,000 in cash prizes and attracted more than 3,000 entries for four storefront categories: drugstores, food stores, automobile sales and service stations, and apparel shops. The portfolio of 52 designs that received prizes or honorable mentions were published to “stimulate the interest and imagination of hundreds of thousands of store owners throughout the country and induce them to bring their stores up to date.” Surviving examples of pigmented structural glass are relatively rare today, but this portfolio provides a valuable record of its application and potential.

Glass Block

Glass block can be traced to 1886 and the French architect and engineer Gustave Falconnier, who received a patent for what he called *briques de verre*, or



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TOP: Octagonal duralumin medallions on the façade of the New York City Health Department Building by German-born metal designer and fabricator Oscar Bach. Photo: Sawani Chaudhary

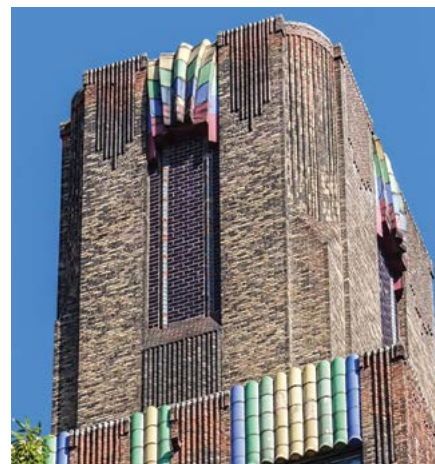
BOTTOM: Detail of the amethyst-colored glass block panel inset in the tower of the Towne House Apartments. Photo: Meghan Weatherby

OPPOSITE PAGE:

LEFT: William Lescaze House, said to be one of the first modern residences in New York City, features glass blocks prominently on the façade.

TOP RIGHT: Detail of the entrance to Kramer House, which features glass blocks above the door and on the fourth floor façade. Photo: Sawani Chaudhary

BOTTOM RIGHT: Detail of Morris B. Sanders House showing the distinctive blue glass bricks and glass blocks that frame the vertical steel casement windows on the fifth floor. Photo: Sawani Chaudhary





glass bricks, two molded pieces of glass annealed together with a hollow center. Early New York examples of the use of glass block from European suppliers include the four-story glass atrium roof of the former Barbizon Plaza Hotel at 106 Central Park South (now Trump Parc), which opened in 1930, and the large rectangular amethyst-colored glass block panels in the tower of the Towne House Apartments at 108 East 38th Street, also completed in 1930.

As the 1930s progressed, American manufacturers such as the Macbeth-Evans Glass Company, Owens-Illinois, and Pittsburgh Corning Corporation began producing glass block. In 1933, Owens-Illinois introduced this new material to the public in its Glass Block Building at Chicago's Century of Progress International Exposition. The symmetrical pavilion, with its staggered 50-foot tower flanked by two projecting wings, was constructed entirely of multicolored glass blocks, approximately 25,000 of them.

Glass block features prominently in the architect William Lescaze's remodeling of a nineteenth century brownstone at 211 East 48th Street that he transformed into his home and studio. Said to be one of the first modern residences in the city,

the four-story townhouse with its simple, flat stucco façade, originally painted off-white, contains two large rectangular glass block windows at the third and fourth levels that extend almost the entire width of the building. A solid glass block wall separates what was Lescaze's office, just below ground level, from the street. The attention Lescaze's unique design attracted earned him commissions for two other townhouses that incorporated glass block: the 1935 Kramer House at 32 East 74th Street and the 1941 Norman House at 124 East 70th Street.

Not far from the Lescaze House is another example of the residential use of glass block, a five-story townhouse completed in 1935 containing the ground-level office of the architect Morris B. Sanders, who designed it, and two duplex apartments above. The white marble facing of the first level is punctuated by a large panel of small glass blocks that illuminated the office space. Distinctive blue glass bricks clad the four upper floors of the townhouse. Large glass blocks frame the vertical steel casement windows at the third and fifth levels and within the balconies at the second and fourth levels. Glass block infill is also found on the rear façade. A 1936 article in *Modern Mechanix* labeled the house the "latest architectural miracle to be wrought by glass blocks."

Glass block became one of the hallmarks of the Streamline Moderne architecture of the 1930s and was prominently featured in several pavilions at the 1939 New York World's Fair. Glass blocks formed the curvilinear wall at the entrance to the Ford Building, although much of the glass block was replaced with white Carrara glass for the 1940 season. The Glass Center Building was fittingly constructed almost entirely of glass block, and a glass block fountain adorned the exterior of the Metals Building.

Many of the innovative materials that added such pizzazz to the architecture of the Art Deco era fell into oblivion as newer, and less expensive alternatives became available following World War II and tastes began to change. However, their legacy lives on in these surviving examples in New York City as well as skyscrapers, residences and storefronts found in cities and towns throughout the United States.

Kathleen Murphy Skolnik teaches art and architectural history at Roosevelt University in Chicago, Illinois, and leads seminars on Art Deco design at the Newberry Library, a private research library also in Chicago. She is the co-author of *The Art Deco Murals of Hildreth Meière* and a contributor to the recently published *Art Deco Chicago: Designing Modern America*. She currently serves on ADSNY's Advisory Board.

THERE'S NO PLATE LIKE CHROME

By JIM LINZ

Chromium became so pervasive in the 1930s that a typical American might enter a room using a chromium-plated doorknob, turn on the water using a chromium-plated faucet, fix breakfast using a chromium-plated percolator and cookware, drive a car with chromium-plated trim, wear jewelry with chromium-plated settings, tell time with a chromium-plated clock or watch, and relax on furniture with a chromium-plated tubular steel frame.

Columbia University researchers invented the commercial process for electroplating a thin layer of chromium on other metals in 1924, but the discovery occurred too late to impact the 1925 Paris Exposition internationale des arts décoratifs et industriels modernes. Chrome plating exploded commercially beginning in 1926, becoming a defining element of the Art Deco era. Compared to nickel, chromium provides a harder surface that resists scratching and does not rust, tarnish, or oxidize. Another advantage of chromium plating is the pleasing blue-white appearance, compared to the yellowish tinge of nickel-plating.

Chromium quickly became the plating of choice for industrial design in automobile parts and accents, as well as household items, including giftware, cookware, kitchen appliances, barware, smoking accessories, clocks, and tubular metal furniture.

Development of Chromium Plating

Chromium (CR, Atomic Number 24) was discovered in 1797 by the French chemist Nicolas-Louis Vauquelin. Although plentiful in the earth's crust, chromium always appears in deposits with other elements.

Initially, there were few commercial uses for chromium. Beginning in the 1820s and 30s, chromium compounds were used in textile dyes and in printing wallpaper. In the mid-1800s, metallurgists discovered that adding about five percent chromium to steel alloy produced corrosion-resistant properties. Today's stainless cookware is about 18 percent chromium.

Electroplating refers to the process of coating an object, typically another metal, by using an electric current. Although electroplating of silver and many other metals dates to the 1840s, the process for commercially elec-

troplating chromium was not developed until 1924. At that time Colin Fink and associates at Columbia University developed a process for producing protective chromium coatings and were awarded a patent in 1926 (P.N. 1,606,159). Rights to the patent were assigned to the Chemical Treatment Company of New York, New York.

Automotive

Oldsmobile became the first automaker to switch from nickel plate to chromium in March 1927 and had begun advertising the change several months earlier. Oldsmobile used chromium on such parts as radiator shells and caps, bumpers, door handles, and window cranks. Other General Motors units soon switched to chromium, as did other automobile and truck manufacturers. For example, Studebaker Motors announced in October 1927 that it would replace nickel with chromium in all future production.

Household

Chromium plating began its meteoric increase in household use in 1927 and 1928, led in part by Manning-Bowman & Company of Meriden, Connecticut, and the Everedy Company of Frederick, Maryland. Initial growth in household use was in hardware and kitchen appliances like coffee pots, toasters, and waffle irons. By the mid-1930s, chromium touched almost every aspect of Americans' day-to-day lives.

Founded as a manufacturer of tinware and other household goods, Manning-Bowman became a leader in the production of kitchen appliances, vacuumware to keep beverages hot or cold, and giftware. It experimented with chromium plating in 1927, leaving a chromium-plated percolator exposed on the factory roof during the winter. Although the body of the percolator was undamaged, the company had trouble with the plating on the soft solder used on the seams. While it worked to solve that problem, it proceeded to introduce a line of chromium-plated flatware in late 1927, supplying it first to a local restaurant and then to the public in early 1928.

In 1929 Manning-Bowman switched from nickel to chromium plating for most of its product lines, including percolators, toasters, and its Hotakold® vacuumware. Most prominent in the 1930 catalog were chromium-plated

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LEFT: Oldsmobile advertisement in *The Saturday Evening Post*, February 19, 1927, noting use of chromium plating.

RIGHT: Lloyd Chromium-plated furniture from a mid-1930s catalog.

OPPOSITE PAGE LEFT TO RIGHT:

Manning, Bowman Rocketship Coffee or Tea Service (K10570), Aranium (chromium) plate with Jade Catalin mounts and Catalin tray.

Array of Everedy Evercraft® Cocktail Shakers with the Gigilo and Gigolette cigarette boxes plated in Butler brushed chromium.

Telechron Modernique (Model 431B) with Chrome Enamelled finish, designed by Paul Frankl.

Manning, Bowman Skyscraper clock (No. K 906) with polished chromium case accented by ivory Catalin, 1929.





coffee and tea services and mixers, a service for post-Prohibition cocktails, with impressive Art Deco styling. Prices for the sets were up to \$135. Introducing a high-end range of appliances and mixers within months of the stock market crash on October 29, 1929 proved to be a mistake, and the lines were discontinued in 1932.

Everedy's product line, established in 1920 to produce home bottling equipment, soon expanded to include screen doors and other hardware. The company was an early advocate of chromium plating, quickly expanding from hardware use to plating auto parts for nearby manufacturers. In 1933 Everedy introduced its Speedy-Clean chromium-plated steel skillet. Long before Teflon® and other nonstick cookware, Everedy promoted the ease of cleanup of its chromium-plated surface and the ability to cook without grease. The skillet was so successful that Everedy quickly expanded into a full line of cookware.

While promoting its cookware, Everedy introduced a line of chromium-plated giftware under the Evercraft® name. The cookware line proved so successful that efforts to promote the giftware were reduced until the early 1930s.

Coinciding with Chicago's A Century of Progress International Exposition in 1933–34, multiple companies added or expanded offerings of chromium-plated household appliances and giftware. These included Manning-Bowman's new 1933 line of giftware and household appliances, many designed by Jay Ackerman and Bert Farr; Chase Brass and Copper Company's first full catalog of giftware and hostess accessories introduced in 1933, including designs by Walter von Nessen, Russel Wright, and Lurelle Guild; Revere's 1935 catalog of Chromium-plated giftware with designs by Norman Bel Geddes; and Everedy's Modern Gifts catalog.

Clocks

The late 1920s and 1930s was a time of fundamental change in clock making, including the development of electric timekeeping and the use of new materials such as Bakelite and chromium plating for both cases and trim. Manning-Bowman was again a leader.

In April 1930, Manning-Bowman introduced a line of 17 electric clocks. Although the line consisted primarily of traditional wood-cased models, it included four chromium-plated models of modernistic design. The movements for the models were produced by the Hammond Clock Company.

Manning-Bowman expected the new clock line to match or exceed the success of the company's household appliance line. Introducing a high-end line of clocks just months after the stock market crash proved to be a serious

mistake. With models that dwarfed the industry leader Telechron in both size and price, the entire line was discontinued in little more than a year, with discounts of 50 percent or more to clear inventory. Manning-Bowman President Reginald Tracy committed suicide in 1931, reportedly because of personal losses suffered in the stock market crash and the failure of the clock line.

Despite the failure of the Manning-Bowman clock line, chromium plating became commonplace on clocks produced by other manufacturers of both spring-wound and electric clocks, and for both cases and trim.

Furniture

Developments in metal production in the 1920s had a major impact on furniture design. One of the most dramatic was the development of seamless steel tubing that offered light, strong, and reasonably inexpensive framing.

One of the highlights of the 1925 Paris Exposition was the tubular steel furniture by Marcel Breuer and Le Corbusier. The steel was likely an alloy containing chromium to add strength and resistance to corrosion. Breuer tried to nickel-plate his chair but was not satisfied with the results.

Four years after the Paris Exposition, the Howell Company of Lake Charles, Illinois, began producing seamless chromium-plated tubular steel frames trademarked Chromsteel. Howell's Chromsteel furniture gained national attention at the Century of Progress Exposition. Howell hired Wolfgang Hoffmann as its principal designer.

Other companies quickly entered the market with their own designs for chromium-plated tubular furniture. Companies included Lloyd Manufacturing Company of Menominee, Michigan, with designs by KEM Weber, Alfons Bach, Lydia Larsen, Alfred Turner, and Elof Klar. Larsen was touted as "bringing that deft feminine touch so essential to objects for the home." Additional companies included Royal Metal Manufacturing Company of Chicago, with designs by Donald Deskey, and Troy Sunshade Company of Troy, Ohio, with designs by Gilbert Rohde.

A wide variety of chromium-plated objects from the 1930s is still available to collectors today, many in excellent condition, thanks to the ingenuity of the inventors and designers of the Art Deco era.

Jim Linz is the author of five celebrated books on Art Deco including Art Deco Chrome. Linz is the President Emeritus of the Art Deco Society of Washington and editor/publisher of its quarterly magazine, Trans-Lux. As an antique dealer, Linz sells primarily at Modernism shows.

All Photos: From the collection of the author

CINEMAS AND ART DECO: A GLOBAL AFFAIR

BY ROBIN GROW



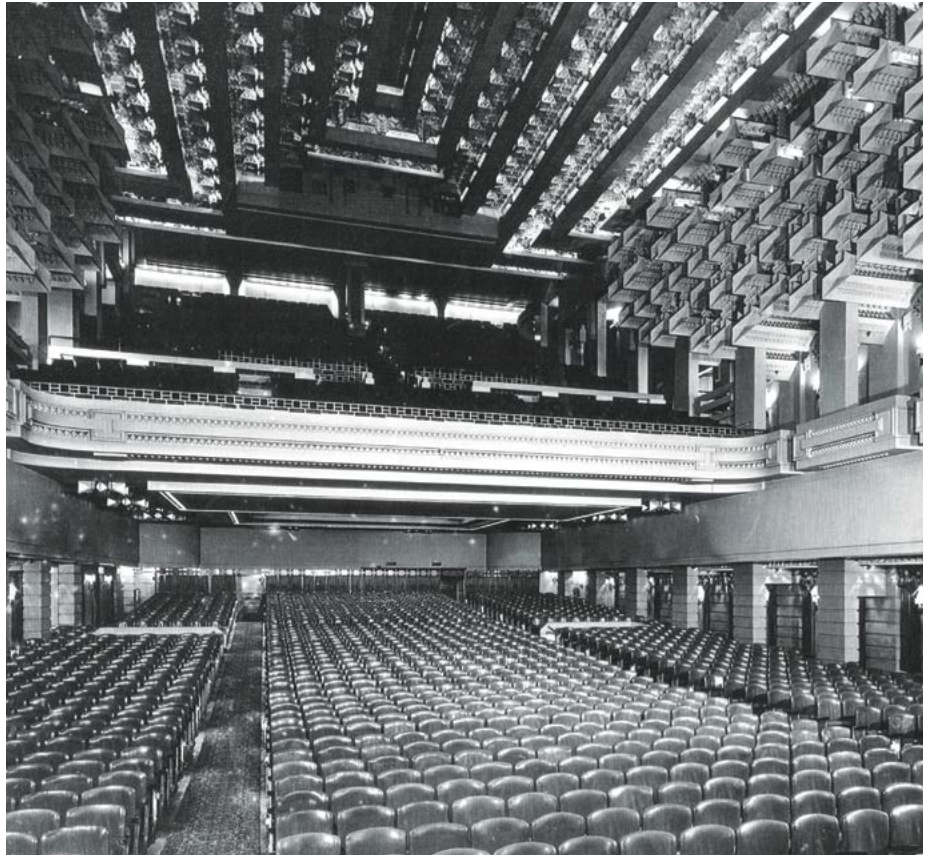
THIS PAGE LEFT TO RIGHT:
The Chicago Theatre, Chicago.

Archival photo of the The Capitol theater
auditorium, Melbourne.

OPPOSITE PAGE TOP TO BOTTOM:
Le Grand Rex façade, Paris.
Photo: Meghan Weatherby

Atmospheric auditorium of Le Grand Rex, Paris.
Photo: Meghan Weatherby

The Academy Theatre, Los Angeles. Photo:
Julius Shulman, 1939. S. Charles Lee Papers.
Department of Special Collections, Charles E.
Young Research Library, UCLA



Going to the movies—how exciting! In the 1920s and 30s, people all around the world could see a vision of the future that was inextricably linked on many levels to the rise of Art Deco design, often described as the first fully international architectural style. Perhaps no other building type demonstrates this like the cinema, which played a major role in illustrating and spreading the style, in the bricks, mortar, and concrete in cities and towns as well as in the images displayed onscreen.

In the post World War I (and post-1918 flu pandemic) years, the world was seeking even more entertainment, and the cinema increased its grasp on society enormously. The industry was increasingly controlled by large studios as it moved from penny arcades and nickelodeons to purpose-built venues. Not only did the cinema anchor an entirely new—and rapidly growing—industry, but it also led the way in new fields and professions, including cinematography, marketing and advertising, global distribution, interior design, and acoustical engineering. In the United States, a new era was born, with large-scale studio and production concerns realizing the new medium's commercial prospects, particularly after studios relocated from the

East Coast to Hollywood. By 1921 the Paramount chain boasted 300 affiliated theaters across the country. The films were silent, often accompanied by pianists and other musicians—sometimes on large Wurlitzer organs—who created dramatic effects linked to what was happening on the screen. But the introduction of “talkies” in the late 1920s forced a major change to the fledgling industry, requiring new equipment to produce and present films in this format.

Early cinemas were rudimentary, but the improvement in the quality of films led to much larger venues constructed or converted from theaters previously used for music, opera, stage plays, and vaudeville. Fine examples of movie palaces were constructed in the early twentieth century, often with elaborate interiors in a range of styles, including historical revivalist designs. Some combined the staging of live theater and film, while many were for film projection only, requiring little backstage infrastructure. Architects and designers skilled in this medium began to make their mark. Typical was the Chicago Theatre, in Chicago's Loop district. It opened in 1921 and was designed by the Rapp brothers, Cornelius and George, in Neo-Baroque French-revival style. It

represented large, costly, and grand movie palaces and played an important role in the film world.

In the 1920s, new styles for cinemas emerged, and the palaces were soon dominated by Modernist and Art Deco styles. A major example is The Capitol theatre, in the center of Melbourne, Australia. Most Australians lived in major cities around the coastline and had been quick to establish themselves as enthusiastic moviegoers. The southern city of Melbourne boasted numerous cinemas in the 1920s, none as striking as the Capitol, by the American couple Walter Burley Griffin and Marion Mahoney Griffin, designers of the new national capital, Canberra. Opened in 1924, its most remarkable features were the abstract geometric designs on the interior walls and ceiling in a series of plaster blocks, giving an impression of a crystal cave. It was not a stand-alone cinema. Like many, it anchored a commercial building with shops and offices—a layout later employed around the world. But in the early 1920s it was radical. Despite some 1960s modifications, it has long been recognized as one of the world's great twentieth-century cinemas and has recently been refurbished.

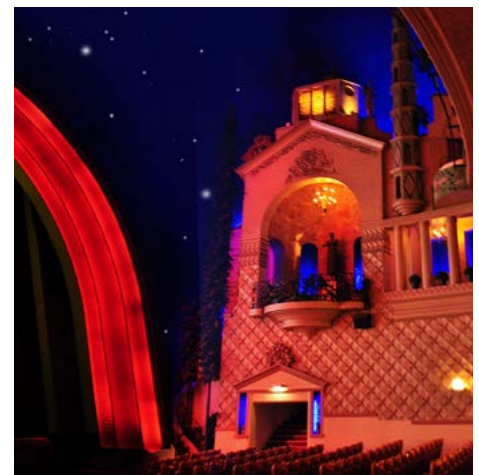
The 1930s saw the update of many existing cinemas and the construction of numerous new ones, generally owned by the large studios as part of a chain, all equipped with facilities to accommodate sound and larger screens. While the Great Depression affected cinema attendance, moviegoing remained popular as a way to escape the exigencies of life for a small outlay. The actual cinema experience started on the street, or, as architect S. Charles Lee is quoted as saying, "The Show Starts on the Sidewalk!" This was also the era of advertising, with the advent of large, colorful neon signs, designed to catch the eye of passing traffic—on foot, on streetcars and in an ever-increasing number of automobiles.

The cinema's name was an important element. Theater names were intended to be dramatic and convey style and luxury. Some were commonly used in cinemas around the world, such as the Roxy. Originating in New York as a nickname of Samuel L. Rothafel, the impresario behind Radio City Music Hall, it was then used across America in Hollywood, Miami Beach, Atlanta, Tennessee, and Washington, as well as international locations such as Leeton, Australia; Wellington, New Zealand; Berlin, and Toronto. Other names were intended to portray glamour, such as Regent, Ritz, Grand Rex, Astor, Imperial, and Empire, while some were simpler and just identified their town or district, such as Bay, Des Plaines, Bad Axe, and Everett. Some were associated with important events or concepts, such as the Liberty, while others were named for theater owners or prominent people, including politicians and heads of state such as Senator and

Bolívar. Some were associated with prominent locations in other countries, such as the Alhambra in Tel Aviv and the Milan in Havana, or with figures from mythology—the Minerva and Eros.

Some cities, such as Los Angeles and Buenos Aires, boasted streets with a succession of competing cinemas. The new cinemas were designed in a variety of styles, although the elements were consistent: a lobby, a stand-alone ticket booth, restrooms, a concession stand, and an auditorium, and sometimes with seating divided into classes that allowed different ticket prices, and segregation by race or gender. A major component was a projection booth, or bio-box. These spaces were not always safe: celluloid film could be combustible, and cramped bio-boxes could be death traps if fire broke out. Some cinemas were described as "atmospheric," such as the Grand Rex in Paris, which opened in 1932, with an auditorium featuring a starred ceiling and fairy-tale decorations on both sides of the screen, including water features. The exterior provided a dramatic and stunning example of Art Deco design that was beginning to be seen around the world on new and updated cinemas. The proliferation of more modest and more economical venues in the simple Moderne style meant lower setup and operating costs but could stand out by the use of multi-colored and glossy surfaces of vitrolite, an opaque glass product, chrome, and other metals, and stylized lettering for the theater name on the marquee and large vertical signs. Elaborate interiors with chandeliers, ornamental plasterwork, and sculptures were often replaced by simple streamlined walls, perhaps enhanced with speed lines, etched glass, rounded corners, glass block, carpeting or linoleum flooring with geometric designs, machined metal, and stylized lights and fittings. Many buildings were striking in appearance, enlivening mundane streetscapes, and became exciting style icons, particularly in small towns. In areas where Art Deco design was common, like South Beach, Miami, cinemas such as the 1936 Cameo, with its tropical motifs, fitted in seamlessly. Some stood out by virtue of defined styles, such as Moorish, Mayan, Egyptian, and Aztec, while others were prominent because of the placement of a dramatic large tower, visible for long distances, such as the spiral tower on the Academy in Los Angeles, lit in blue neon at night.

European cities and towns boasted numerous cinemas, and countries such as France, Italy, and Germany fostered their own film industries and distribution networks, often badly affected during the depression years. England was a major force in cinema design along with its production networks throughout the British Empire. Across Britain, cinemas emerged that dominated main streets with designs ranging from highly elaborate to simpler Moderne. One firm provided numerous examples of striking,



THIS PAGE:
TOP LEFT: Odeon Cinema, York. Photo: Adrian Whittle

BOTTOM LEFT: Teatro Opera, Buenos Aires.

RIGHT: Eros Cinema, Mumbai.

OPPOSITE PAGE:
LEFT: Poster for the Grand Cinema, Shanghai.

TOP MIDDLE: Stand-alone ticket booth designed by S. Charles Lee for the Academy Theatre, Los Angeles. Photo: Julius Shulman, 1939. S. Charles Lee Papers. Department of Special Collections, Charles E. Young Research Library, UCLA

TOP RIGHT: Camera crew sculptures in the lobby of the Hollywood Pantages Theatre, Los Angeles.

BOTTOM RIGHT: Interior of the Hotel Cinema, Tel Aviv. Photo: Meghan Weatherby



stylish architecture. The Odeon circuit, founded by Oscar Deutsch, began with a cinema in 1928 and expanded greatly in the 1930s. Eventually Deutsch was responsible for over 350 cinemas, either designed by a variety of architectural firms or acquired from competitors. Odeon employed a house style for its exteriors, often combining rectangular and rounded elements and invariably dominated by stepped forms, vertical fins, or tower-like rectangular structures. Interiors were characterized by simple lines on walls and ceilings of ribbed plaster. Many remain and have been landmarked, but, with the advent of television, many ceased screening films and became bingo halls, now threatened by bans on smoking.

The rise of the film industry in the 1930s was largely driven by free enterprise. Studios exercised control over the product, driven mainly by the profit motive. But in Europe, where totalitarian states had emerged in Germany, Italy, and other countries, they were operating in a complex political environment. These governments controlled film production and distribution and mandated that films be used as instruments of propaganda. Other countries, such as Great Britain, also produced propaganda, encouraging studios to produce films that endorsed patriotism and loyalty to the Empire, increasingly threatened by Nazi Germany.

The fervor for film also took hold in Central and South America. Argentina took up cinema with a passion and, early in the century, embraced films created locally as well as those from Europe and America. The industry in Buenos Aires replicated Hollywood, with big studios, important directors, stars, luxurious wardrobes and sets, and a range of associated businesses, such as movie magazines, which covered Argentina and the rest of Latin America. Buenos Aires claimed to have the "largest and most varied set of cinemas in the world,"¹ and it is still possible to experience the era's style and elegance in cinemas captured in the Teatro Opera's stepped tower. In Brazil, Cariocas (natives of Rio de Janeiro) could enjoy the latest films at temples of the style, such as the Cinema Metro, the Brazilian version of the Roxy at Copacabana, and the Olinda.²

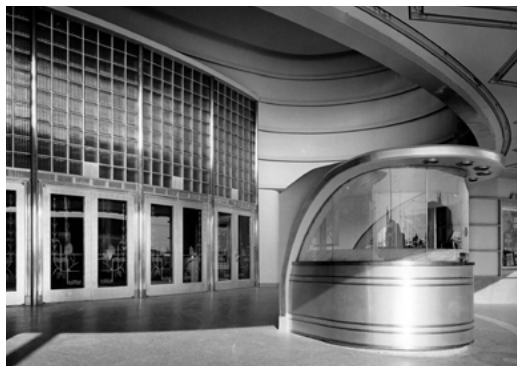
In the 1930s, large cinema chains also developed across Africa—in Egypt, South Africa, Mozambique, Ethiopia, and the Congo—the Middle East, and

Asia, particularly in India, with the construction of striking cinemas in major cities such as Bombay (now Mumbai), Calcutta (now Kolkata) and Delhi. Perhaps India's most distinguished cinema was the Eros in Churchgate, Bombay, designed by local architect Sohrabi Bhedwar—unusual because most cinemas in Asia were designed by Western architects—and constructed in 1938. The four-story building, on a prominent corner beneath an octagonal tower, was much more than a cinema; it was a major entertainment center and billed itself as the "Most Modern Theatre & Restaurant in the World." When it opened, it also housed an upscale European ballroom and restaurant seating 500, an ice skating rink, and luxury offices and retail shops.³ On the lobby columns were figures of mythological gods, including the Greek god of love, Eros.

Some cinemas emerged from the hands of architects in places where there was little history of modern buildings or cinemas. A fine example was in Shanghai, China, where a key architect was Hungarian-born Laszlo Hudec. Along West Nanjing Road, near his massive Park Hotel, Hudec designed the Grand Cinema, which opened in 1933 with 2,100 seats, showing films from Japan and overseas. The exterior was distinguished by perpendicular planes and angular surfaces that contrasted with gently concave voids. Walls of glass stood in vertical panels above the entrance.⁴ It stands today as a fine example of Art Deco design in Shanghai. It has been remodeled a few times, and the latest version contains wonderful graphic images of the theater on the interior walls.

Some architects of the era concentrated almost exclusively on cinema design. One prominent example was S. Charles Lee, responsible for over 300 cinemas across the United States and a few in Latin America. A busy man, Lee saved time on his projects by flying between them in his Beechcraft, greatly impressing his investors. It seemed that every town wanted its own movie theater. Working for Fox West Coast Theatres, Lee used a simple formula for his designs, many of which remain today, with an emphasis on "efficiency and cost control" intended to provide a good dividend for the owners.⁵

When people around the world went to see a film, what did they experience? First, they had to decide what to see. Some patrons had regular bookings and



would turn up regardless of what was showing. Others were more selective, and one of the major challenges facing studios was to determine what people would pay their hard-earned money to see. Would it be drama, musicals, comedies, cartoons, or documentaries? And which stars would reliably bring in crowds?

When filmgoers entered the lobby of an Art Deco theater, what did they see? Interior lobbies became stylized, with dramatic use of the latest materials on walls, such as tiles and vitrolite sheets. Durable terrazzo was used extensively on floors, often incorporating the cinema's initials or logo. Examples of Deco styling may be found in the lighting, often recessed, glasswork, metalwork, clocks, and floors. Some paid homage to the history of the cinema, such as the Pantages at Hollywood and Vine in Los Angeles, whose lobby features a wide stairway, lined with sculptures in Art Deco style, one depicting a camera crew filming.

But the first place to visit was the ticket booth, generally stand-alone, some designed to look like spaceships. And, of course, the concession stand, a feature of Art Deco theater, designed to maximize revenue, where popcorn became a staple. These stands were—and still are—strategically placed so that customers had to pass by to enter the auditorium.

Once inside, seating was generally plush. Walls and ceilings tended to be streamlined, consisting of simple lines in the plaster walls, or geometric or circular motifs. Air conditioning was a major attraction in hot locations, where cinemas could boast the comfort of cooled auditoriums.

One issue that developed in the early days of the cinema was audience behavior, which often reflected the local culture. English-speaking audiences generally frowned on talking during the show and were encouraged to refrain from foot-stomping and whistling. In the volatile world of interwar Palestine, crowds—both Jews and Arabs—could be more raucous; silent-film audiences told the actors how to behave and when to watch out for danger, chewed and cracked sunflower seeds, and greeted any onscreen couple kissing with deafening whistles.⁶ Such behavior was modified after the introduction of sound films in the late 1920s. Some cinemas featured “crying rooms” where mothers could

leave their babies while watching the film; they were issued a number, which would be flashed on the screen to alert the mother if the baby cried. Cinemas in many countries, such as Britain, tolerated smoking until in the 1970s. Audience misbehavior continues to be a concern of theater operators, more so today with the proliferation of cell phones.

Post-World War II developments in cinema included the perfecting of color and Cinemascope, requiring modification to many cinemas to accommodate larger screens in the early 1950s.

Many Art Deco cinemas around the world have deteriorated and are being converted to multiplexes, repurposed as churches, or replaced by apartments or commercial space. Often they are victims of their valuable size and desirable locations, as well as technological developments such as streaming.

But as lovers of the style travel the world seeking examples of Art Deco or Modernist design, the discovery of an intact cinema is one of the great thrills. You can still catch a film at the Rex in Paris or a Broadway show at Hollywood's Pantages, and in Tel Aviv, you can spend the night in the Cinema Hotel in Dizengoff Circle, created out of the former Bauhaus-style cinema called the Esther.

Robin Grow is the longtime President of the Art Deco & Modernism Society of Australia and author of the award-winning *Melbourne Art Deco* (2009). He has researched and written extensively on the interwar era and has presented papers at local, national, and international conferences. He is heavily involved in ICADS and currently holds the role of Vice-President with responsibility for preservation activities.

Endnotes:

1. Mimi Böhm, *Buenos Aires Art Deco Y Racionalismo*, 2008, p. 309.
2. Marcio Roiter, *Rio de Janeiro Art Deco*, 2011, p. 79.
3. Navin Ramani, *Bombay Art Deco Architecture*, 2007, p. 212.
4. Edward Denison and Guang Yu Ren, *Modernism in China*, 2008, p. 212.
5. Maggie Valentine, *The Show Starts on the Sidewalk*, 1994, p. 9.
6. Rachel Neiman, “Israeli Cinemas of Yesteryear Get Repurposed or Closed,” *Israel21c*, January 15, 2018, <https://www.israel21c.org/israeli-cinemas-of-yesteryear-get-repurposed-or-closed/>.

All Photos: Robin Grow unless noted otherwise

DECO RADIO: WHEN ART MET INDUSTRY

BY PETER SHERIDAN



Famous industrial designers used a new style, new materials, and mass production in the turbulent 1930s and 40s to create beautiful, colorful, streamlined tabletop radios, starting a trend that brought modern Art Deco styling into homes around the world.

The years from 1930 to 1940, wedged between the deprivations of the Great Depression and upheavals that presaged World War II, presented a pocket of opportunity for radio design. The common image of radio before its miniaturization to the transistor radio in the 1960s is that of a drab piece of wooden furniture or an unremarkable brown plastic box. But there was a period of glamor and innovation that is almost forgotten, except by a small group of collectors who hold the last specimens of this important lineage. Fueled by the genius of industrial designers, the advent of new materials and methods of marketing, better manufacturing processes, and changes in consumer buying habits, this was truly a golden age of radio and an important element in the globalization of modern style.

Radio may be seen through a number of different prisms: as an important type of mass communication; through the technical framework of radio electronics; via the evolution of radio stations; through the diverse news and entertainment content, often featuring celebrities; and through the aesthetics of its presentation as a cost-effective, visually appealing domestic appliance. The focus here is on design, with radio as a leading player in the evolution of a new style movement, animated by the genius of the most famous industrial designers in the world. This flowering of radio from 1930 to 1940 is rarely appreciated for its importance in the world of industrial design and to the beginnings of Art Deco styling in the home.

The first consumer radios in the 1920s were a complex mix of separate elements, consisting of a receiver with multiple controls, a battery, and a speaker or headphones. As these components became integrated, radio design initially followed the style of the gramophone and in the late 1920s, aided by the availability of electricity in the home, evolved into the popular console radio.

INDUSTRIAL DESIGNERS—DESIGN TIMELINE

RAYMOND LOEWY, UNITED STATES

- 1929 Gestetner Duplicator Revamp
- 1931 Westinghouse *Columnaire* Grandfather Clock Radio
- 1933 Colonial *New World* Radio
- 1933 Colonial 300 Radio
- 1934 Electrolux Coldspot Refrigerator for Sears & Roebuck
- 1936 Pennsylvania Railroad K4S Locomotive
- 1936 Pennsylvania Railroad GG-1 Electric Locomotive
- 1939 Lucky Strike Cigarette Packet
- 1941 Schick Electric Razor
- 1950 Studebaker Champion Starlight Coupe
- 1953 Studebaker Starliner Coupe
- 1954 Greyhound Scenicruiser Bus
- 1961 Studebaker Avanti Coupe
- 1961 British Petroleum Logo
- 1962 Shell Logo

WALTER DORWIN TEAGUE, UNITED STATES

- 1928 Kodak Gift Camera
- 1932 Marmon 16 Automobile
- 1934 Kodak Baby Brownie Camera
- 1935 Sparton *Nocturne* Radio
- 1936 Sparton *Bluebird* Radio
- 1936 Sparton *Sled* Radio
- 1936 Kodak Bantam Special Camera
- 1936 Texaco Gas Stations
- 1937 Kodak Bullet Camera
- 1938 Sparton *Cloissone* Radio
- 1939 Polaroid Desk Lamp
- 1939 Steinway Piano
- 1948 Polaroid Model 95 Camera
- 1946 Boeing Stratocruiser Airplane Interior
- 1940s Maxwell House Automatic Coffee Making Machine
- 1940s UPS Delivery Truck

HAROLD VAN DOREN, UNITED STATES

- 1933 *Air King* Radio
- 1933 Skippy Racer Scooter
- 1934 Wayne Pump Company Gasoline Pump
- 1934 Sno-Plane Sled
- 1935 American National Company Children's Bicycles, Tricycles, Scooters, and Wagons
- 1935 Toledo Scale
- 1939 Maytag Master Washer

NORMAN BEL GEDDES, UNITED STATES

- 1931 Philco 370 *Lazyboy* Radio
- 1937 *Majestic 651* Radio
- 1937 Revere Manhattan Cocktail Set
- 1939 New York World's Fair *Futurama* GM Pavilion
- 1940 Emerson 400 *Patriot* Radio

JOHN VASSOS, UNITED STATES

- 1924 Armand Products Screw-Top Lotion Bottle
- 1932 Perey Turnstile Company Turnstile
- 1935 RCA Phonograph
- 1936 RCA 6K10 Radio
- 1936 RCA Victor 8T11 Radio
- 1936 RCA Victor 9K10 Radio
- 1937 Streamlined Kitchen Paring Knife
- 1938 Hohner Accordion
- 1939 RCA Television
- 1939 Hohner Harmonica
- 1939 Storytone Electric Piano
- 1939 General Electric Teardrop Record Player CJM3 Bakelite

ISAMU NOGUCHI, UNITED STATES

- 1929 Portrait of R. Buckminster Fuller
- 1937 *Zenith Radio Nurse*
- 1944 Noguchi IN-50 Table
- 1956 UNESCO *Le Jardin de la Paix, Jardin Japonais* The Garden of Peace, or Japanese Garden

CASTIGLIONI BROTHERS, ITALY

- 1938 Caccia Cutlery Set
- 1940 *Phonola* Radio
- 1956 R.E.M. Spalter Electric Vacuum Cleaner
- 1957 Sella Stool
- 1962 Flos S.p.A. Arco Floor Lamp
- 1962 Flos Taccia Lamp
- 1965 Brionvega RR 126 Stereo System

WELLS COATES, UNITED KINGDOM

- 1930 British Broadcasting House Studio
- 1932 Kensington Palace Gardens
- 1934 Ekco *AD65* Radio
- 1934 Ekco *AC85* Radio
- 1934 Isokon Flats Building Lawn Road Flats
- 1935 Ekco *AD36* Radio
- 1935 Ekco *AD76* Radio
- 1935 Yeomans Row
- 1936 Embassy Court
- 1939 10 Palace Gate
- 1940 Ekco *AD75* Radio
- 1945 Ekco *A22* Radio
- 1949 Telekinema Cinema Building



This was a piece of wooden furniture with Victorian styling hiding the radio components, intended for the living room and usually controlled by the man of the house. The wooden console always remained popular but even with Art Deco styling in the 1940s, rarely strayed from its box-like form and eventually morphed into the radiogram (radio, record player, and sometimes television) in the 1950s and 1960s.

Radio boasted the fastest uptake of any of the new technologies of the twentieth century, including telephone, television, and the Internet. Radio brought about a third wave of the democratization of information (the advent of speech and the printed word being first and second). Newspapers, magazines, and books were the predominant communication media of the nineteenth century, but literacy rates overall were not high. The spoken word was universal, and radio enfranchised the least educated with information they could assimilate. In addition, it was actually less expensive to provide radio waves than newspapers in remote and rural areas. By 1940, 90% of the people in the United States, Great Britain, Europe, and Australia had radios in their homes, and 75% got their news through this medium. This saturation could not have happened without the advent of the tabletop or mantel radio, which first appeared in Germany, created by the Nora Radio Company in 1929. This was a portable cabinet with simple tuning and volume controls containing all the electronics and a speaker and connected to an electrical outlet. By 1930, tabletop wooden radios appeared in Great Britain and the United States, but Nora led the way in Germany in 1930 with the first Bakelite tabletop radio, the *Sonnenblume* (German for Sunflower), which is a masterpiece of early radio technology enveloped in an Art Deco designed and mass-produced Bakelite cabinet.

Unlike the console radio, the tabletop radio had no design predecessor, and although countless numbers were subsequently made of wood and with traditional styling, there was an opportunity for new ideas in cabinet design, materials, and

the target market. Its success is measured by the fact that after 1933 many more tabletop radios were sold than consoles. By 1930, radio had moved from a novelty to a necessity, and, given the number of people out of work and struggling financially during the years of the Great Depression, it is extraordinary how many radios were sold around the world from 1929 to 1935. This was a burgeoning market in an otherwise commercially depressed era. Hundreds of radio manufacturers looked for opportunities to expand their markets, and the confluence of many diverse factors created a unique moment in the evolution of this medium.

The new profession of industrial design engaged people who had come from other disciplines, such as graphic design, theatrical set design, fashion illustration, and architecture. They all had little or no work during the Depression. However, the new tabletop format for radio offered an integrated, more user-friendly apparatus of a portable size, creating potential for multiple units in the home and workplace. In stepping away from the constraints of the large wooden console radio in the living room, the tabletop radio effectively changed the listener from the family to the individual; it also broadened the scope of radio programming and the listening audience. Importantly, the concurrent expansion of electricity in the home underpinned the expansion of radio sales.

Added to this was the utility of the new nonflammable synthetic plastics (Bakelite, Catalin and urea formaldehyde products with brand names such as Plaskon and Beetleware.) These could be mass-produced much more cheaply per unit than wood radio cabinets which required more skill and time for production and finishing. Being nonflammable, the plastic cabinets could closely approximate the chassis and its tubes with infinite possibilities for external design. Here the artisan was replaced by the assembly line.

The new plastics offered scope to incorporate the new Style Moderne design (which today we call Art Deco or Streamlining) and create a whole

OPPOSITE PAGE TOP TO BOTTOM:

The first Bakelite tabletop radio. Nora *Sonnenblume* (Sunflower), Germany, 1929.

Design Timeline listing some of the most notable industrial designers with their early work on radios highlighted in gold.

THIS PAGE LEFT TO RIGHT:

A grouping of radios designed by some of the notable industrial designers listed in the Design Timeline.

Walter Dorwin Teague, *Sparton Nocturne*, United States, 1935.

Raymond Loewy, *Colonial New World*, United States, 1933.

Harold van Doren, *Air King*, United States, 1933.

Norman Bel Geddes, *Emerson Patriot*, United States, 1941.

J. Sampson Spencer, *Automatic Tom Thumb*, United States, 1938.

Wells Coates, *Ekco AD65*, United Kingdom, 1934.



A grouping of radios influenced by industrial designers and showing the influence of the streamline aesthetic.

TOP ROW LEFT TO RIGHT:
Artes AR3, Spain, 1947.

Kadette K25, Clockette, United States, 1937.

FADA 1000, Bullet, United States, 1945.

Radio-Glo, United States, 1935.

Rubis 70, Belgium, 1933.

BOTTOM ROW LEFT TO RIGHT:
Motorola 50XC, Circle Grille, United States, 1940.

Emerson BT245, Tombstone, United States, 1938.

Symphony, United States, 1939.

EGM, Mexico, 1940.

AWA Radiolette and Cigarette Box, Australia, 1934 and 1936.

new type of radio cabinet that reflected modernity and progress. Some radios clearly derive from other streamlined Deco objects; skyscrapers, trains, and rockets, others from the aerodynamic shape of a bullet, a sled or the grille of a car. Reduction in the size of radio tubes in the mid-1930s allowed for small cabinets to be produced and, almost exclusively in the United States and Australia, a wide choice of colors encouraged advertising targeted to women to place radios in all the rooms in the home.

A number of smaller radio companies commissioned industrial designers to create radios that would offer a cost-effective home appliance to be mass-produced and mass-marketed. These designers were all early in their careers, and almost all went on to be founders of Streamlining, luminaries of industrial design, and much more famous for their subsequent commissions. These commissions for inexpensive radio designs were not for major corporations and clearly not considered prestigious, as they were generally ignored in later homages and biographies. But the larger, more complete picture confirms that this was the moment when art met industry, and it was the embedding of electronics into consumer products that gave rise to a radical shift in both design possibilities and people's relationships with objects. For the first time, a product's potential behavior and functionality was disconnected from its physical form. Radio became an object consumers chose for their homes, on the basis of not just what they would hear, but how it would look. Radio became a visual as well as aural experience. Companies manufacturing radios were forced to modify their cabinet designs each year (whether or not there were technical advances) as choice and change became synonymous with retail marketing.

The industrial designers were innovators who empowered their successors, creating a bench-

mark for other radio makers to aspire to quality styling. They used a wide range of materials (mainly plastics, but also glass, metal, and wood), but their coherent bond was the shedding of fussiness in favor of streamlined design. The collateral effect over the next 10 years was significant in the U.S. and all around the world. Australia is a good example of a country with no known radio designers, yet the style of locally made radios in the mid-1930s clearly was influenced by the radios created by American and British industrial designers. A true anomaly is the very rare wooden console, the *Pacific Elite*, made in New Zealand in 1934, which shows how good design can overcome the inherent limitations of material and a furniture mentality. By 1950, in the U.S. many inexpensive Deco-style radios sold in department stores were made from painted metal. A small quantity were chromed, and today these little gems are highly sought by collectors.

Overall, this small subset of designer-influenced radios from the 1930s represented a minuscule proportion of global radio production and sales, but by virtue of their aesthetic attributes and clever incorporation of radio components, they influenced all radio cabinetry to some extent. Their influence was global, reinforcing the spread of the Art Deco aesthetic in radio design around the world. It should be noted that the impact of the Depression and the upheaval leading into World War II meant that in many countries consumer radio production was halted or severely limited, and the prewar designs emerged only when production resumed in the late 1940s and even the early 1950s.

Most of these radios are rare today, and some are limited to a few remaining examples. They are highly collectible and valuable, not so much for their design lineage, but for their genuine beauty and visual appeal.

Some 37 designers have been identified who created Art Deco radios, with most coming from the U.S. and UK, but with a representative each from Germany, Italy, and the Netherlands. Of the Americans, Harold van Doren and Raymond Loewy started the ball rolling in 1933. Van Doren became the President of the Society of Industrial Design. Loewy was later known as the "father of streamlining," "the father of industrial design," and "the man who shaped America." Norman Bel Geddes is known as "the man who designed America" and Dorwin Teague as "the dean of industrial design." John Vassos was called "the quintessential modernist." All these designers are more famous for other—mainly later—creations, everything from a matchstick to a city.

In the U.K. the Ekco Company led the world in the early 1930s to produce modern style radios in the new plastics, hiring well-known architects including Wells Coates, Serge Chermayeff, J.K. White, Jesse Collins, and Misha Black. Coates designed the world's first round radio and refined the use of the circle within the radio itself, a feature that spread around the world. But try as it might, Ekco, for all its beautiful designs, could not persuade the British public to buy a radio that wasn't black or brown until the late 1940s. The Castiglioni Brothers designed for Phonola in Italy and Louis Kalff in the Netherlands for the Philips Company. Walter Maria Kersting in Germany was notable for using radio design for Nazi propaganda purposes.

Catalin was first used for radios in 1936 by the Fada Company in New York and became popular in the U.S. Catalin was a cast phenolic commonly used for jewelry, with glorious translucent colors. This was perhaps the first introduction of mix-and-match elements in retail choice with the Catalin cabinet in one color matched to the grille and knobs in another. An example is Dorwin Teague's tiny Sparton Cloisonne of 1938, probably the most cultured and evolved of all the Art Deco radios. With a white Catalin cabinet, which fades over time to butterscotch, and Tenite (cellulose acetate) knobs, the front is enameled in one of four colors—red, blue, brown, or yellow—and decorated with chrome circles and horizontal lines. One circle contains the textured speaker cloth. It is the only radio with such a variety of materials, and yet the effect is a seamless and subtle unity. It is perhaps a high point of the integration of form, color, and texture in the evolution of radio cabinetry, these criteria also forming the mantra of the industrial designer and underpinning much of Art Deco styling.

Radio brought the world into the home, opening channels to all sorts of news and entertainment,

breaking down isolation and privacy, exposing people to an expanding world of listening opportunities. For example, music in the home in the nineteenth century—before the advent of the gramophone—was performed by family members on their own musical instruments. The gramophone and record player, which were popular in the first two decades of the twentieth century, were overtaken by radio from the mid-1920s to the 1950s, when individual records and stereo became desirable. Radio dramatically increased the number of individuals listening to music and expanded the audience for music to all ages and all social classes. Initially all music on radio was live, with bands and entertainers performing in the studio, but better recording methods in the 1930s allowed for programming flexibility and, with the networking of radio stations, hugely expanded the listener base.

A beautiful radio can satisfy the senses. Looking at the colors and shapes is a visual delight. Run your hand over the surface of a Catalin or Bakelite radio, and the smoothness and fluid curves are almost sensual. When you turn on an old valve radio, there is first nothing, then a light hum, and then the crackle of static. These aural cues speak of a time past and another social milieu.

The streamlined radio cabinet was a new style of modern object in home décor. It represented, and was symbolic of, the new Machine Age future by virtue of its aesthetics, independent of the core audio function and its many benefits.

Today, radio is part of a blended barrage of modern digital broadcasting, and future generations will most likely not recognize a radio as a discrete device. Radio still serves as an entertainment and information medium and, in a more modern iteration, an arbiter of social exchange. But as it dissolves into the cocktail of digital mass media, it is important to articulate the evolution of its social, technical, and design history. There was a time when radios were beautiful, and after a hundred years it would be a shame if they were forgotten.

Peter Sheridan is an internationally renowned collector and speaker on Art Deco as well as a committee member of the Art Deco & Modernism Society of Australia and an accredited professional photographer. Sheridan has authored three major photographic reference books on design and architecture including: *Radio Days: Australian Bakelite Radios* (2008), *Deco Radio: The Most Beautiful Radios Ever Made* (2014), and *Sydney Art Deco* (2019).

This article is a reference from Sheridan's 2014 publication *Deco Radio: The Most Beautiful Radios Ever Made*.

All Photos: From the collection of the author



TOP TO BOTTOM:

Pacific Elite, New Zealand, 1934. One of the few wooden radios in the world that exemplify the streamline aesthetic.

Walter Dorwin Teague, Sparton Cloisonne, United States, 1938. Blue and red models of a small, rare, and elegant expression of Art Deco styling.

A group of six chrome radio from Arvin and Temple sold in department stores in the US in the 1950s.

SHAPING SPEED: DESIGNING ART DECO AUTOMOBILES

BY KEN GROSS



THIS PAGE TOP TO BOTTOM:
1937 Cord 812 Westchester.

1934 Chrysler Airflow Imperial C8 Coupe.

1936 Stout Scarab.

OPPOSITE PAGE:
1938 Dubonnet Hispano-Suiza H-6C "Xenia."

Art Deco embraces distinctive architectural, industrial, and fashion styles that originated around 1910, flourished through the late 1920s and early 30s, lasted until the beginning of World War II in 1941, and returned for a while after World War II ended. Although its influence had waned and the later examples were less ornate, Art Deco styling elements persisted into the 1950s, especially in the world of automobiles. Making excellent use of beautifully rounded forms, mixing baroque elements like the stylized rays of the sun, and artfully melding gentle, flowing curves with razor-sharp edges, these cars were quintessential examples of streamlining. Today many are considered classics.

Streamlining was equated with modernity as well as with efficient aerodynamics, especially in transportation. The automobile, an invention of the early twentieth century, rapidly changing and evolving mechanically during that period, was the perfect metal canvas on which to express the popular Art Deco style. Mark McCourt, who has written about Art Deco automobiles, said, "It was an era of unbridled, machine-driven technical advancement, of optimism in the unlimited possibility that the future held."

"Automobiles reflected all this potential," McCourt added. Despite the Great Depression, "the vibrant promise of modernity and speed" was reflected not just in luxury goods, but also in mass-produced items. "Some brave and revolutionary cars paid tribute to the *zeitgeist* with their overall design concepts," he said, "but most showed their Machine Age influence in small ways, in subtle and glorious details."

For automobiles and motorcycles, Gary Vasilash, the Editor-in-Chief of *Automotive Design & Production* magazine, agreed, claiming: "... the Art Deco style can be characterized as the combination of broad gesture and fine detail."

Though the Art Deco influence wasn't specifically labeled at the time, it was widespread. Acclaimed architects and industrial designers such as Frank Lloyd Wright, Norman Bel Geddes, Walter Dorwin Teague, Raymond Loewy, and Walter Gropius fell under its spell, as did many noted automotive stylists, race car innovators and engineers like Jean Bugatti, Amos Northup, Phillip Wright, Harry Arminius Miller, E.T. "Bob" Gregorie, Harley Earl, Bill Mitchell, Gordon Miller Buehrig, and Walter P. Murphy.

The Streamline Cord

Perhaps the high-water mark of Art Deco influence on automobiles in America is found in the Cord automobile, built in Auburn, Indiana, from 1929 through 1937. The Model L-29 Cord was a highly advanced car in its day. Custom-bodied L-29s, such as the much-acclaimed one-of-a-kind Hayes/de Sakhnoffsky and Saoutchik custom coupes, as well as a few bespoke sedans and limousines by Walter M. Murphy, commissioned for Hollywood celebrities in Pasadena, California, used many Art Deco conceits. Although they look dated today, they remain artistically pure and perfect. Frank Lloyd Wright recognized that the front-drive L-29 Cord's bold architecture facilitated a dramatically low silhouette, which greatly pleased the most noted architect of his time.

Its successors, the stunning Cord Model 810 and 812, introduced in 1935 and 1936, respectively, embodied nearly every conceivable Art Deco and streamline design element, inside and out. Gordon Miller Buehrig, who also designed the acclaimed Auburn 851 Speedster, created an amalgam of stark angularity and luscious curves. Even the external flex-pipe exhausts on the Model 812, a symbol that became a hallmark of supercharged Auburn, Cord and Duesenberg cars, spoke to a widespread yearning to repeat popular Art Deco forms in nearly every design and engineering application.

The Art Deco Bugatti

In mid-1930s France, Jean Bugatti was the talented 25-year-old son of the automaker Ettore Bugatti, whose road and racing cars demonstrated a delightful flair that hinted at Art Deco influence. But it was Jean's skillful and repeated applications of dramatically curved forms, punctuated with controlled edginess and sweeping lines, that created some of the most memorable automotive shapes of the interwar period.

Jean Bugatti's stunning Type 57 Superprofile coupe employs a dashing ogee curve that races rearward from the car's distinctive Bugatti horseshoe-shaped radiator (Ettore was a noted equestrian), rises in a picture-perfect arc thanks to a dramatically raked windscreen, and tapers to a flared, almost impudently shaped deck lid. It's a pleasing form that makes you smile at its audacity. Auto stylists today are still influenced by this Bugatti's exquisite roofline and its complementary side sweep panel.

American Art Deco Cars

Chrysler's top engineers, led by the innovative Carl Breer, attempted to change popular automotive perceptions with a decidedly different approach to streamlining and design. The Chrysler Airflow emulated crack passenger trains like the fabled Union Pacific *Streamline Express* and the B&O Railroad's *Burlington Zephyr*. But while the fickle public had accepted the shift from classic steam locomotives to modern diesels, it balked at buying a new car whose lines so abruptly departed from commonly accepted styling practice. Although the Airflow, with its smooth ride, built-in safety elements and flow-through cabin ventilation, was superior to its rivals, Chrysler was forced to redesign the Airflow's pioneering shape and graft a conventional cover over its new grille.

Nearly out of business as the Great Depression endured, Pierce-Arrow, a once-proud luxury manufacturer based in Buffalo, New York, that vied with Packard and Cadillac, won a competition at the 1933–34 Chicago Century of Progress International Exhibition with its shapely Silver Arrow, a streamlined leviathan limousine, armed with a locomotive-like 12-cylinder engine. Its Art Deco elements ranged from its sweeping flush fenders that hid the show car's side-mounted spares, to “. . . an intriguingly sinister rear window treatment

[that] perched two slivers of glass in a periscope-like rear peak.” Rear vision was terrible, but it looked great. Art Deco accents and details made the Pierce appear as if Erté himself had a hand in its conception. Phillip O. Wright, a prolific auto stylist, was largely responsible for the design. Just five Silver Arrows were sold, at a then-heady \$10,000 each. Pierce-Arrow's and Studebaker's attempts to market a watered-down version of Wright's design failed, as did Pierce-Arrow in 1938.

Some automakers embodied myriad Art Deco touches that are evident only upon close observation. The Jordan Model Z Speedway Ace and the Packard Model 1104 are two examples. Both boast lovely, intricate design elements like impossibly long hoods, overly ornate instrument displays, filigreed door handles, curved and skirted fenders, unusual headlight shapes repeated with tiny matching running lights, and wire wheels that, when spinning, resemble airplane propellers. It is not known who designed the Jordan, but Phillip Wright, who had previously worked for Walter M. Murphy and then LeBaron, had a firm hand in the Packard's conception.

William B. Stout, a successful aircraft engineer, had designed the famous Ford Tri-Motor airplane. His radical Scarab is arguably one of the most Art Deco-inspired cars ever offered. Oddly beetle-shaped and aircraft-influenced, and a forerunner of the minivan, the Scarab had fluted headlamps, an Egyptian-style nose badge, pert rows of “whiskers” in lieu of a conventional grille (its Ford flathead V-8 was rear-mounted), and a prominent peak that divides the hood and the front windows, all whispering, “Art Deco, Art Deco.” However, only a few Stout Scarabs were ever made. The lethal combination of high price, high risk (buying an unknown make) and sheer unconventionality made them certain to become a lasting footnote to the best of Art Deco style, coupled with an all-too-human reluctance to move forward with bold new ideas.

Classic Art Deco-influenced Designs

The innovative French scientist and engineer André Dubonnet teamed up with his country's most imaginative aircraft designer, Jean Andreau, to design the aperitif baron's personal dream car on a Hispano-Suiza chassis. The flamboyant Parisian *carrossier* (coachbuilder) Jacques Saoutchik performed the coachwork honors. Named to memorialize Dubonnet's young wife Xenia Johnson, who tragically died at an early age, the strikingly attractive coupe resembles a sleek 1930s-era airplane minus wings. Gull-wing windows, parallel doors that open alongside the body, a wicker interior, and horizontal trim elements that accentuate this car's racy shape made it a timeless Art Deco classic.

The worldwide acclaim for Charles Lindbergh's solo flight across the Atlantic to Paris in 1927 helped focus many auto designers on the merits of aerodynamics and aircraft shapes. At first, it was simply the look that captivated them. Then





engineers and aerodynamicists began to realize that streamlining had an efficiency component. The next task was to ensure that the designs themselves, while making cars that began to resemble wingless airplanes, remained attractive and acceptably carlike, without alienating conservative buyers used to more standard styling.

In England in the 1920s and 30s, what became known as the Airline design practice popularly retained recognizable radiators, grilles and front-end elements of marques like Rolls-Royce, Daimler, Bentley, Jaguar, and even Singer and MG, while the designers streamlined, rounded and tapered the cars at the rear. The front-end visages remained largely the same, but from the rear, these free-flowing bodies appeared quite modern. Good examples include the Mercedes-Benz Autobahn-Kurier and the Delage D8-120S. The Mercedes-Benz 540K's haughty grille was retained with all its baroque opulence, while from the windscreen to the rear, the body is curved and tapered.

The prototype for the Delage Aérosport Coupe offered a bold grille design that appeared windswept, but this conceit was not continued for the resulting small series of production models. The Delage D8-120S by Carrosserie Saoutchik displays the sweeping lines and chrome accents the flashy, Russian-born Paris-based coachbuilder preferred, but this coupe's fascinating parallel doors were not a common D8 accoutrement. A witty saying in France in the Art Deco era was that "one is driven in a Rolls-Royce, one buys a Bugatti for one's mistress, but one drives a Delage."

Edsel Ford, the only son of the auto magnate Henry Ford, was the consummate car enthusiast. Although he could have purchased any sporting automobile in the early 1930s and did own a Bugatti Type 37A, he ordered the Ford Motor Company's styling chief, Eugene T. "Bob" Gregory, to design and build a sleek two-seater, with a race car-inspired, streamlined body, curvaceous cycle fenders, an alligator hood, and the latest Ford flathead V-8, fitted with straight exhausts.

Edsel's natty sports two-seater was constructed by skilled workers at Ford's aircraft facility, using sheet aluminum panels hand-formed into a pleasing shape that echoed the best racing car practice of that era. He hoped his smart-looking Continental-style roadster could become a limited-production model, but Henry Ford, his puritanical and eminently practical father, would have none of it. Despite rumors to the contrary, fueled because period photos of the Model 40 show it with two different hood treatments, only one example was built. Fully restored, after having been hidden for years, the Model 40 Speedster is a glimpse of what might have been. Edsel's own hot rod remains a triumph of minimalist Art Deco styling.

In contrast, Gabriel Voisin's automobiles often defied description, as the French so often follow their own distinct path in design. Voisin's success as an aircraft builder helped underwrite his forays into automobile design. His cars borrowed techniques and styling touches from aircraft practice: angular shapes, dihedral struts to firmly attach fenders to fuselages, skirted fenders that aped airplane

wheel pants, crank-out windscreens, sling-back seats and more.

Bold interiors like the one in the Voisin C27 coupe were a riot of geometric Art Deco patterns. Instrument panels borrowed their dial shapes and instrument typefaces from prevailing Deco design examples. Even in their day, Voisin's cars stood apart, and his insistence on using complex Knight sleeve-valve technology perversely meant that while his power plants were virtually silent, they left a noxious haze of blue smoke in their wake.

Streamline cars from Czechoslovakia's Tatra represented a different approach. Named for the nearby Tatra mountain range, and the third oldest carmaker in the world behind Mercedes-Benz and Peugeot, Tatra built uniquely engineered automobiles until 1999, then switched to building just trucks. Tatra's engineers were Hans Ledwinka, who had his own unique approach to nearly every challenge, and Edmund Rumpler, a pioneer designer of aerodynamic cars. Protected by high tariffs in Czechoslovakia, Ledwinka began building Tatra sedans with air-cooled, rear-mounted V-8 engines.

In 1934, Tatra obtained a license from the aerodynamicist and Graf Zeppelin designer Paul Jaray to build the Type 77, a full-sized fastback and the world's first truly aerodynamic car. Wind tunnel tests of a model showed its coefficient of drag was 0.24. The actual car's was 0.36, well below 0.54 for most cars of that period. The Volkswagen Beetle resembles the V750 Tatra, which preceded it.

Ledwinka's aerodynamic little 1936 Tatra T97 had a rear-mounted, air-cooled four-cylinder boxer-type engine, a central structural tunnel floor-pan, rear-wheel-drive, four seats and a front luggage compartment. The VW Beetle's similarity sparked a lawsuit by Ledwinka against Volkswagen and its designer, Ferdinand Porsche. When the Germans invaded Czechoslovakia in 1938, the suit was dropped; after the war, it was re-initiated and VW had to pay a \$3 million settlement.

Parisian *carrossiers* Claude Figoni and Ovidio Falaschi were by practice, and as expressed in their own advertisements, the "Couturiers of the Automobile." Their ateliers handcrafted automobiles that truly resembled Parisian couture on wheels. Voluptuous shapes, fully skirted front fenders, dramatic speed line themes repeated in several places, low windscreens and rooflines, long hoods, selfish (single-person) cabins, teardrop motifs—all contributed to the unique appearance of a Figoni and Falaschi dream car. The coachbuilders impressed attendees at the 1936 Paris Auto Show with their first presentation of a custom Delahaye. French fashion enthusiasts pioneered the creation of the Concours d'Elegance, really a closely judged fashion show for fine automobiles, each accompanied and accented by a beautifully dressed woman whose designer ensemble was color-coordinated and themed to complement the car.

Figoni-built classics dominated these Concours exhibitions with their audacious, often impractical, but memorable designs, usually built on an expensive sporting chassis from topline marques like Delahaye, Delage and Talbot-Lago. It was as if a beautiful gymnast had been fashionably dressed by a top couturier like Coco Chanel. The underpinnings of these stunning cars were full competition variants, while their sleek aluminum skins were exquisitely molded, painted in bright hues or glittering piano black, then accentuated with delicate kisses of polished alloy and discreet chrome trim. Bespoke Delahaye 135M/135MS coupes and roadsters displayed a multitude of these variations—beautiful then, beautiful now. Nothing like them has been built since.

The Type 57C Bugatti, a perfect example of life imitating art, was a gift from the French government to Prince Reza Pahlavi, the future Shah of Iran, upon the occasion of his first wedding, to an Egyptian princess. While the design is reminiscent of the house of Figoni, the unique coachwork, featuring a functional roll down windscreen, was created by Vanvooren, another Parisian coachbuilding establishment. The Prince's supercharged Bugatti, one of the top sporting cars of its day, was equipped with a race-inspired, 3.3-liter twin-cam straight 8 engine. Typically, the alloy surfaces under the hood would be engine-turned (or damascened) with a scroll or wave pattern, itself an Art Deco conceit.

In the 1930s, it was commonly believed that the teardrop was the perfect aerodynamic shape, so it became a repeated Art Deco design theme. The T-150C-SS Talbot-Lago is one of a limited series of expensive custom coachwork exercises on high-performance chassis. Wealthy buyers could specify individual touches, such as faired in or free-standing headlamps, sunroofs, long or short tails, vestigial fins, hood louvers, and all manner of fancy interior fabrics and special hides. As if these limited-production custom cars weren't unique enough, the *carrossiers* would entertain client suggestions of color selections, accessories, fitted luggage, disc or wire wheels, standard or pre-selector gearboxes, and other personalized choices.

The Last American Deco Cars

The Chrysler Thunderbolt, created and shown just before World War II, is both a continuation of 1930s-era Art Deco themes seen in the Scarab and a modern view of where cars would be heading in the postwar period: slab sides, a pancake hood, hidden headlights, minimal decoration, horizontal trim elements evoking speed and progress—all signaling the car of tomorrow. Unfortunately, the Thunderbolt, and its companion four-door phaeton, the Newport, were limited in production, partly by cost and partly because the American automobile industry would soon be gearing up to become a major part of "The Arsenal of Democracy," the collective efforts of American industry in supporting the Allies.

By 1939, when the world sadly resumed the horrific battle that had ended with the Armistice in 1918, automobiles, in Mark McCourt's words, "... had transcended pure function and become the ultimate personal accessories, desirable for their design as much as for their speed, luxury and practicality ... [speaking] volumes about their owners' tastes and their parent company's engineering bravado. And in 1946, when automobile production resumed after World War II, the world was in a different place, with a new sense of the awesome (as well as awful) power of machines. Automobile design would soon take a different path, leaving the glorious Art Deco cars and (styling) cues of this late interwar period unique and forever celebrated."

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A founding member of the International Chief Judges' Advisory Group, Gross judges at many North American and European concours. He has received the Automotive Hall of Fame Distinguished Service Citation, the International Motor Press Association's Ken W. Purdy Award, the Motor Press Guild's Dean Bachelor Award and the Lee Iacocca Award.

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OPPOSITE PAGE:

TOP LEFT: Edsel Ford's 1934 Model 40 Special Speedster.

TOP RIGHT: 1934 Tatra T87.

BOTTOM LEFT: 1934 Voisin Type C27 Aérospout Coupe.

BOTTOM RIGHT: 1937 Delahaye 135MS Roadster.

THIS PAGE:

1938 Talbot-Lago T-150C-SS Teardrop.



BRINGING LUXURY TO INTERNATIONAL TRAVEL

BY MEREDITH HINDLEY

In the spring of 1940, the Marine Air Terminal opened at New York's LaGuardia Airport. The two-story building was designed by Delano & Aldrich, who had forged a reputation for decadent Beaux Arts buildings. The terminal, however, was pure Art Deco, from the circular core that served as the waiting area to the flying fish jumping across its exterior terracotta frieze and the metal fretwork on its doors. In the waiting area, white marble floors and black marble paneling signaled luxury, while small touches, like a propeller design inlaid on the ends of the benches, nodded to the terminal's purpose. A sweeping mural depicting the history of flight by James Brooks, created under the Works Progress Administration, gave passengers a taste of what was to come. Men and women had harnessed the heavens, and the trip they were about to take was the latest innovation in that quest.

The terminal was home to Pan American Airways Clipper service to Europe. Its northern route to Southampton, England, via Newfoundland and Ireland took about 27 hours; the southern route, to Marseille via the Azores and Lisbon, around 44 hours. The trip cut the Atlantic crossing from a week by ship to less than two days by air. After clearing passport control, passengers exited the terminal and proceeded along a long wooden dock to board one of Pan Am's Boeing 314 flying boats. Instead of concrete, the Clipper used the waters of Bowery Bay as its runway. The flying boat's sleek silver exterior, thick two-story fuselage, and curved form are emblematic of the Art Deco aesthetic, but its form was actually a product of technical and logistical necessity.

Pan Am's passenger flights to Europe culminated a decade-long pursuit by Juan Trippe, the company's founder. After building a business delivering mail and goods to far-flung destinations on flying boats, Trippe turned his attention to passenger travel, which necessitated a level of luxury not required by a mail sack. Trippe embraced Art Deco for Pan Am's terminals and the flying boats' interiors. To make the Clipper passenger routes profitable, he needed to sell technological innovation cloaked in glamor, and Art Deco's sleek lines, rich finishes, and devotion to metals such as steel and aluminum offered the perfect aesthetic.

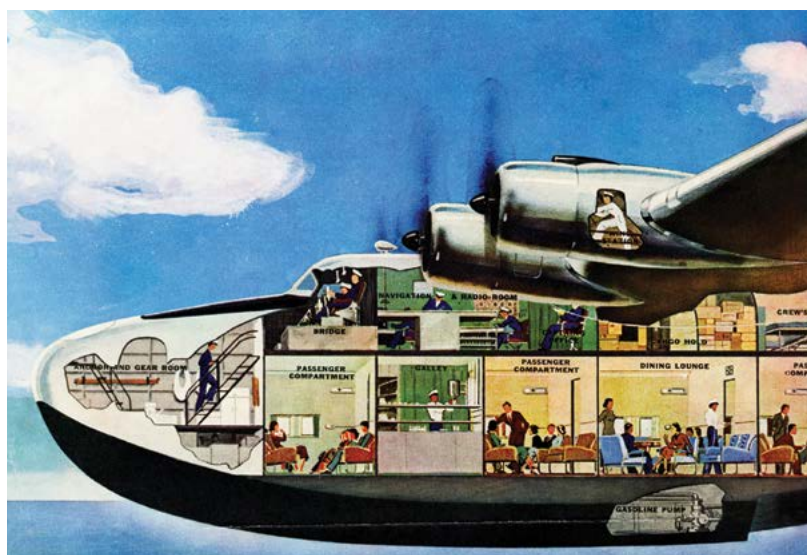
The first Clippers in 1931 were the brainchild of Trippe and Igor Sikorsky, an aeronautical engineer who had escaped revolutionary Russia. After building an empire in Latin America by using amphibious planes to carry mail and goods to areas lacking runways, Trippe began to dream about carrying passengers along those routes. He wanted to do for air travel what Cunard had done for sea travel: create a luxurious experience where the journey was as important as the destination. "He had been fascinated then, and was fascinated still, by the Cunard mystique, by the romance of shipboard life, and his ambition now became to run Pan American as a kind of nautical airline," writes Robert Daley in *An American Saga: Juan Trippe and His Pan Am Empire*.

Trippe teamed up with Sikorsky to create the Sikorsky S-40, a four-engine seaplane with lavish interiors and attention to comfort that could carry 38 passengers and maintain a cruising speed of 100 miles per hour. Harking back to nineteenth century ships, Trippe dubbed his new fleet "Clipper" and infused the aesthetic with both nautical and Art Deco sensibilities. The cabin featured walls paneled in polished mahogany, which also dampened the sound and vibrations from the engines, and the furnishings were sleek and streamlined. On November 19, 1931, the first Clipper flight with paying passengers left Miami for Panama, with a stopover in Cuba. At the controls was Charles Lindbergh, who had been integral to testing the S-40. Soon Clippers were flying from Miami to Buenos Aires and Rio de Janeiro, with stops in between.

Recognizing that the journey needed an aura of luxury from the start, Pan Am turned to Delano & Aldrich to design a terminal for its Miami operations. The two-story white stucco building, which opened in 1934, featured black-framed windows and a frieze of rising suns and winged globes below the cornice. Elaborate Art Deco doors beckoned visitors to the main lobby, which featured a three-and-a-half-ton globe. Murals depicting historical aspects of flight decorated the walls and ceiling. An outer promenade provided the perfect spot for watching the Clippers arrive and depart from Biscayne Bay.

Always ambitious, Trippe next turned to conquering the Pacific Ocean. Unlike routes to Latin America, with numerous stopovers, the Pacific was vast. Pan Am needed a plane that could fly at least 2,400 miles, the distance from San Francisco to Honolulu. After that, the plane could island-hop to Hong Kong, Macao, and Singapore. This time the winning design came from the Baltimore-based Glenn L. Martin Company, forerunner of Lockheed Martin. With four Pratt & Whitney engines, the Martin M-130 could travel 3,200 miles in one shot, achieving a cruising speed of 157 miles per hour.

The inauguration of Pan Am's China Clipper passenger service in 1936 turned a journey that took at least two weeks by ship into an eight-day trip by air. From Hawaii, the Clipper stopped at Midway, Wake Island, and Guam before arriving in Manila. For the long flight, the cabin was fitted with lounges, sleeping berths, and dining tables. Four-course meals were prepared at stopover



locations and served hot on the plane. A steward roamed the cabin with coffee and tea—but no alcohol—and gum for smokers, abiding by a no smoking rule.

Passengers originally departed from an artificial harbor on Alameda Island in San Francisco Bay. In 1940, Pan Am and the China Clipper inaugurated their new home on Treasure Island, created with infill from the 1939 Golden Gate International Exposition. Pan Am again turned to Art Deco to set the tone for the Treasure Island terminal. The two-story semicircular structure, made of reinforced concrete to withstand earthquakes, provided architectural drama. Its eleven narrow two-story windows in the center echoed the portico of a Greek temple, and matching reliefs by Jacques Schnier depicted a man holding an airplane.

Even as Pan Am conquered the Pacific, Trippe eyed Europe for a route between New York and Portugal or England. The Europeans, with their own aeronautical ambitions, had no intention of allowing Pan Am to monopolize the routes, but Trippe persisted. In 1937, Pan Am teamed with Britain's Imperial Airways to offer a route from New York to Bermuda and conducted test flights for its New York-to-Europe itinerary while awaiting delivery of its newest plane: the Boeing 314, which offered more cargo and passenger space, and increased profits.

On June 28, 1939, the Dixie Clipper's first passenger trip left Pan Am's terminal in Port Washington on Long Island's Manhasset Bay. Twenty-two hours later, it landed in Lisbon. After a stopover there, the Dixie Clipper continued another six hours more to Marseille. In July, the northern route to Southampton began service.

With the beginning of World War II in September 1939, Pan Am's Clipper service became an escape route for refugees and Americans trying to return to the United States. The northern route, with a stopover in Ireland, was quickly shut down. The Marseille-Lisbon flight continued to operate, providing a means of

escape for refugees with money and diplomats shuttling back and forth. In Asia, Japan's territorial gains forced Pan Am to withdraw from China and curtail other routes. When the United States entered the war, Pan Am's Clippers joined the Army Transport Command, ferrying soldiers and diplomats around the world. In January 1943, President Franklin D. Roosevelt and his staff traveled to the Casablanca Conference by Clipper. Treasure Island became an armed forces training and education center with more than four million American military personnel passing through on their way overseas.

The war ended the Clipper's heyday. Wartime technological innovation led to the development of the Douglas DC-4 and the Lockheed L-049 Constellation, which could travel long distances and land on the ground rather than water. After the war, Pan Am lost its monopoly on the Clipper routes that had made its rise possible.

The Clippers may no longer fly, but the terminals remain. The Marine Air Terminal at LaGuardia still hosts flights by Jet Blue and Spirit Airlines. Preservation and restoration efforts ensure that it continues to shine as an example of Art Deco design. The Florida Dinner Key terminal, abandoned after the war, became Miami's city hall in 1954, but its grand doors were replaced by bland aluminum, and glass and acoustic tiles covered the murals and ceiling. Its massive globe was moved to the Miami Science Museum. The Treasure Island terminal operated as part of a U.S. Navy base until it closed in 1997; discussions about its redevelopment continue. All three former Clipper terminals are on either state or national registers of historic places.

Meredith Hindley, Ph.D., is a historian and author of *Destination Casablanca: Exile, Espionage, and the Battle for North Africa in World War II*. Her work has also appeared in the *New York Times*, *Washington Post*, and *TIME*. Hindley lives in Washington, DC, in an Art Deco building.



TOP LEFT TO RIGHT:

S-40 cabin with walnut paneling, carpeted floor, and blue lights above, c. 1931. Photo: The Pan Am Historical Foundation, Zavada Collection

Marine Air Terminal in New York City. Photo: Library of Congress Prints and Photographs Division, Historic American Engineering Record, HAER NY,41-JAHT,1-1

Pan American Airways System Terminal Building in Miami with approaching S-40, c. 1934. Photo: Library of Congress Prints and Photographs Division, HABS FLA,13-MIAM,2--7

Pan American Airways Boeing 314 California Clipper at Treasure Island in San Francisco, c. 1939. Photo: SFO Museum Louis A. Turpen Aviation Museum and Library, 2000.069.003

BOTTOM:

Cutaway drawing of the Boeing 314 Clipper showing the various interior cabins and compartments. Photo: Smithsonian National Air and Space Museum, 9A08072

HENRY DREYFUSS AND THE 20TH CENTURY LIMITED



Although the history of streamlined trains in the United States reaches back into the nineteenth century, it was not until the 1930s that real experimentation led industrial designers to create the most significant streamlined passenger trains in America, with none so memorable as Henry Dreyfuss's *20th Century Limited*.

Mercury was the name the New York Central Railroad used for a family of daytime streamliner passenger trains operating between Midwestern cities. The *Mercury* train sets, designed by Dreyfuss, are considered a prime example of Streamline Moderne design.

Frederick Williamson took the reins of the New York Central Railroad almost at the moment when Dreyfuss would propose his first streamlined train to the New York Central's management. In Dreyfuss's account of the creation of the *Mercury*, he consulted with Williamson, who oversaw the railway's operations from 1932 until he resigned in 1944. Dreyfuss explained that it was not aversion to the new that almost stopped the development of the *Mercury* (although one vice president, asked by Dreyfuss what he thought of the new designs as he saw them being built, simply exclaimed, "Cleopatra's barge!" as he left the inspection). It was more a matter of money, and the estimates sent to Williamson for a new train were so far out of line with what the railroad planned to invest that Dreyfuss was simply told this leap was going to prove financially impossible.

Dreyfuss later recalled that downcast day as he headed for the country home he and his wife, Doris, had recently purchased north of New York City in Kent Cliffs, Putnam County, until, passing

by the Mott Haven yards in the Bronx, he saw dozens upon dozens of unused railway cars. He got off at the next stop and took the train back into Manhattan, where he proposed to Williamson that the new train be built on existing rolling stock, an approach that proved feasible.

Dreyfuss was off and running with the commission for the first truly integrated steam locomotive and train, one that would run on a highly visible and well-traveled, desirable route. In advertisements, the New York Central highlighted it as its Water Level Route because the path followed the shoreline of Lake Erie as well as the Mohawk and Hudson rivers.

Dreyfuss's refinements in treatment of the "inverted bathtub" of the *Commodore Vanderbilt*, an earlier design by New York Central designer Carl Kantola, made the locomotive seem visually narrower when viewed head-on; it also successfully elevated the smoke from the exhaust so it stayed out of the engineer's eyes and above the train cars. If the *Commodore Vanderbilt* seemed to be lifting a curtain to reveal its running gear, it was celebrated in the *Mercury* locomotives, where its gleaming disc drivers were fully on display. One detail Dreyfuss included was a series of lights over the wheels to allow for inspection of the locomotive after dark; the dramatic effect the wheels created meant they were constantly lit at night.

The *Mercury* achieved what the New York Central was seeking: a new look that compared in appearance to the most advanced designs of the increasingly stylish automobiles from Detroit, as well as new, all-metal aircraft such as the Douglas DC-3. This streamlined train gave the New York Central something striking to advertise while also

serving as a testbed for the updated *20th Century Limited*, which would be new from the ground up.

For the new *20th Century Limited*, Dreyfuss returned to an original design by the American industrial designer Otto Kuhler, who in 1931 modeled a tubular shroud with a torpedo-shaped nose that could cover an existing steam locomotive, giving it a streamlined appearance.

Instead of looking like the *Mercury*—a boiler in a long dress—the *20th Century Limited* looked like the most powerful high-speed locomotive, which it actually was—dressed in a tailored shirt with sleeves rolled up to expose its considerable muscles. The theatrical lighting of the drivers on the *Mercury* had been so successful that Dreyfuss retained that feature on the *20th Century Limited*. Adding a crest to the top of the torpedo-shaped shroud projected its masculinity. The new design was a great success, not just a novelty like earlier streamlined trains. The *20th Century Limited* went on display in Grand Central Terminal on June 15, 1938, and soon commenced runs in both directions between New York and Chicago.

The design patent drawing for the *20th Century Limited* locomotive, applied for in September 1938, makes Dreyfuss's design contribution to the locomotive immediately clear. But there was much more to the *20th Century Limited* than its locomotive and unifying external paint scheme. Aside from its strikingly advanced appearance, the first and most notable change from most trains was that it was an all-room (sleeping car) train with no coach seats. The passenger compartments were made up as comfortable sitting rooms by day that rapidly converted to sleeping



LEFT TO RIGHT

20th Century Limited train (locomotive and new cars) soon after its debut in mid-1938.

First-class interior in the 20th Century Limited of 1938.

Amenities on the 20th Century Limited of 1938.

arrangements at night. No more monotonous seating that looked as if "George Pullman walked through a railroad car and planted seeds in even rows and the regimented chairs and tables that sprouted were the result."*

Each compartment contained a telephone allowing the user to call ahead to the dining car to make reservations. Less readily apparent, but just as important to the passenger experience, was the task-specific lighting Dreyfuss designed with the Luminator Company of Plano, Texas; 14 different new fixture designs were used throughout the 1938 *Century*.

The 20th Century Limited had always boasted of its amenities, and few were lost with the new train. Gone was the open deck at the rear of the last car (the site of many famous publicity photographs), but besides the spittoons, little else was eliminated. Everything the traveler might interact with became Dreyfuss's province. From printed ephemera to the substantial and durable tableware designed for the train, there were constant reminders that this was no typical coach trip between cities. It was more like a rolling hotel, with the crew familiar with the regulars and their special requests, and solicitous of those traveling on the 20th Century Limited for the first time.

After dinner service was cleared, tables were reset and the lighting was dimmed as the dining and observation car became the Club Century, with broadcast music fitting the more relaxed atmosphere. The trip from New York to Chicago was shortened to 16 hours. The combination of speed and amenities meant the 20th Century Limited's only rival was the Pennsylvania Railroad's Broad-

way Limited, styled by the industrial designer Raymond Loewy and the architect Paul Philippe Cret. (The two trains went on display on the same day, and both ran the New York to Chicago route.)

Dreyfuss's changes to the 20th Century Limited attracted major press coverage. Despite a heat wave, hundreds of people toured the new train as it appeared on the tracks of Grand Central Terminal. Advertisements for the train featured a dramatic diagonal in their layout and informed readers that this was a new creation from Henry Dreyfuss. Perhaps the crowning accomplishment for Dreyfuss was his obtaining the more luxurious account than the *Broadway Limited*, which went to Raymond Loewy, who disliked just about everything his competitor had accomplished and said so in print.

The truth was that the New York Central Railroad was doing its best to modernize in challenging times, and the 20th Century Limited—although not the only train redesigned by Dreyfuss—was indisputably the most luxurious.

A grand train running between two major cities daily, often in multiple sections, was a tremendous step forward for Dreyfuss's public visibility. It associated his work with painstaking attention to detail, down to the graphics on the wrappers of the sugar cubes in the dining car, the cocktail napkins from the Club Century, and the other ephemera that reminded patrons of their trip.

One gauge of the train's success was that Dreyfuss was asked to revise his design in 1948, after a decade of hard use that included yeoman service during World War II. The 1948 version

lacked the appeal of the 1938 version—tighter budgets, fewer cars, the replacement of the steam locomotives by diesel-electric units—and the earlier train has slipped into a sort of myth that establishes it as a high point for Dreyfuss's career.

Dreyfuss (and the New York Central) were lucky to have made their wager on the 20th Century Limited when they did: it was the way to go before dependable airline service emerged. But the 20th Century Limited did not simply evaporate; it was still the train of choice in 1959, when Alfred Hitchcock's *North by Northwest* appeared on the screen. As a desperate Cary Grant seeks to avoid arrest, he asks the cool, calm, and collected Eva Marie Saint what she does for a living. "I'm an industrial designer," she replies. Clearly, by 1959, industrial design was no longer unfamiliar. Dreyfuss had moved on to even greater projects, and it wasn't even unusual for women to work as industrial designers.

The romance of the great steam locomotives was rapidly disappearing, however, as the amenities of train travel were increasingly of less concern than issues of time. Advertising for Dreyfuss's work had slipped into the past by the time the 20th Century Limited made its final run on December 2, 1967. Luckily, Dreyfuss had demonstrated his firm's ability to carry off a major project, down to almost negligible details—a valuable recommendation as he took on airliners and ocean liners in the post-World War II era.

Russell Flinchum is an Associate Professor at NC State University's College of Design, and this article is based on a forthcoming book on Henry Dreyfuss to be published by SUNY Press.

* *Designing for People*, 1955, p. 112

ALL ABOARD A WORK OF ART: CINCINNATI UNION TERMINAL

BY J. MILES WOLF

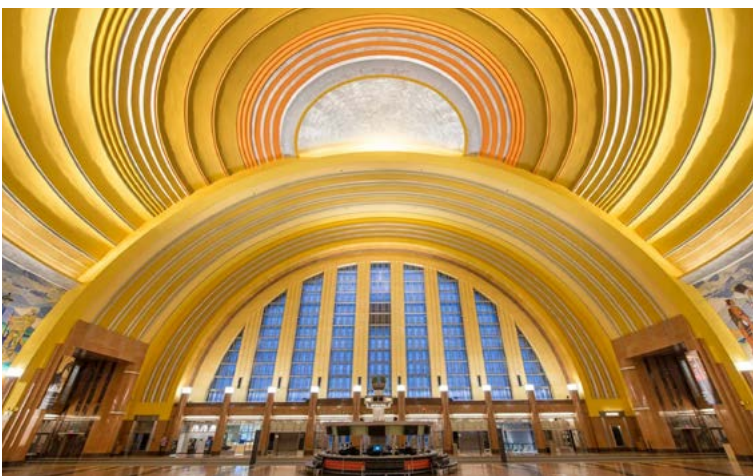
Cincinnati Union Terminal, hailed as an Art Deco masterpiece, is a National Historic Landmark and has been named one of the top 50 architecturally significant buildings in the United States by the American Institute of Architects. When it was completed in 1933, its unique shape and flowing entryways were a modern statement of train station design. Having replaced five local train stations, the new unified station received great praise for its multilayered design and its ability to move thousands of passengers and hundreds of trains seamlessly. Local and national press called it a “Temple to Transportation.”

As the largest half-dome in the Western Hemisphere and one of the last great train stations built in America, the unique structure is the result of a last-minute architectural decision. The station was originally designed to be a grand neoclassical building with columns and arches. But after two years of construction, the owners asked the architects, Fellheimer & Wagner, to redesign the building in an up-to-date, less expensive style. Fellheimer & Wagner tasked its talented young architect Roland A. Wank, along with the French-born consultant and architect Paul Philippe Cret, to redesign the building in the modern style now known as Art Deco.

Cret and Wank were influenced by new European designs and modern styles emerging in the United States. They paid great attention to detail and created a building that was both functional and beautiful. Their use of art as a major component of the interior design created an exciting combination of custom-made artwork intertwined with modern architecture. They commissioned over 60 original installations, totaling over 18,000 square feet of artwork, for the new train station.

The Finnish architect Eliel Saarinen’s design for the 1919 Helsinki Central Station may have influenced the unique shape of the terminal’s exterior. Saarinen used Art Nouveau elements, including a large, arched entry full of glass windows. Cret and Wank took that design concept a step further when they designed the world’s largest arched, half-dome shaped building, which housed the Union Terminal’s more than 100-foot-high rotunda.

Union Terminal is instantly recognizable with its arching form, distinctive curvilinear shapes and gently stepped exterior. The location and orientation of its distinctive façade make the building even more spectacular. It sits high on a manmade hill



visible from downtown Cincinnati, and the long, landscaped approach with a large, cascading water fountain makes it an impressive, welcoming sight.

The façade, with its impressive towering shape, is composed of smooth Indiana limestone with an arched wall of windows over a frame of steel and concrete. The main entry and protective marquee are trimmed with marble and aluminum. The German-born sculptor Maxfield Keck designed and carved two 30-foot-tall Art Deco stylized bas-relief sculptures symbolizing transportation and commerce into the gently stepped pilasters. The sculptures set the stage for entering a building full of art, color, and light.

Inside the rotunda, one stands in awe. The soaring 106-foot-high half-dome ceiling radiates luminous color. A 10-story arched wall of windows fills the room with light. The innovative indirect lighting makes the rotunda a spectacular space at night.

German-born Winold Reiss, commissioned to create murals for the building, executed portraits of local and historical figures in glass tile mosaics. This medium showcased Reiss's distinctive angular and colorful style. The rotunda contains a pair of massive curved murals 22 feet high and 110 feet long. The vibrant west mural portrays the history of the United States and transportation; the east illustrates the history of Cincinnati and the Ohio River valley. Reiss worked with the Ravenna Tile Company of New York to make sheets of small, colorful glass tesserae set into colored stucco backgrounds in a style called shadow mosaic. He designed additional mosaic murals on local industrialized themes that filled the original concourse building with multihued and interesting patterns. Of the 23 original mosaics, eight still remain in the building, including the rotunda murals.

The rotunda features a massive half-dome ceiling with curving, layered bands of stucco painted in yellow, orange, and silver tones. The 180-foot-wide rotunda serves as an entry lobby to the trains, public transportation, ticket windows, and services such as dining and shops. All are marked with Deco-style lettering and silvery aluminum doors and trim. Much of the interior art is intact, though the interior design of the retail shops is mostly gone. However, many historical photographs show interior spaces designed with style and flair. The executive office interiors remain intact with custom furniture, unique aluminum light fixtures, inlaid wood art, patterned veneers, and cork floors, with sound-absorbing cork walls in the boardroom.

The French artist Pierre Bourdelle executed stylized figurative art in numerous media, including carved linoleum for lounges and movie theaters, oil on canvas for ceiling and wall murals, inlaid wood designs for the president's office, and cut-paper wall coverings for other lounges. The Tea Room, another intact space with multicolored Rookwood tile lining the walls and floor

designed by William Hentschel, a local artist, is now a lovely ice cream parlor.

Union Terminal was designed to manage 17,000 passengers and 216 trains daily. In its first years of operation, an average of 150 trains a day passed through the station. Usage peaked during World War II when it averaged 30,000 passengers a day. After the war, rail traffic declined steadily because of the interstate highway system and increased air travel. By 1953, usage was down to 24 trains daily and the terminal was losing money because of its enormous operating costs. Union Terminal closed in 1972, only 39 years after it opened; by then traffic was down to just a few trains per day.

During its decline, the Union Terminal board sought additional uses for the building. In 1968 the Cincinnati Science Center opened on the train concourse. In 1974 the 450-foot concourse was torn down to make way for piggyback freight trains, and the following year the city purchased the building to save what was then thought of as a white elephant from demolition. In 1980, part of the terminal was developed as a mall and entertainment complex, which lasted only five years.

In 1986, Cincinnati voters passed a bond levy to finance the conversion of the terminal into a museum complex, and the Cincinnati Museum Center opened to much excitement in 1990. Union Terminal was now home to the Museum of Natural History and Science, the Cincinnati History Museum with the Cincinnati Historical Society Library, and an Omnimax theater. In 1991, train service returned to the terminal with Amtrak's Cardinal route linking Chicago and New York, which still stops there several times a week. In 1997, the Children's Museum joined the Museum Center. Residents of Cincinnati and Hamilton County passed a series of bond levies to pay for capital repairs and operating costs.

By the early twenty-first century, Union Terminal was in need of another major renovation. Some of the structural steel embedded in concrete was failing, and the dated mechanical systems and windows desperately needed upgrading. Much of the Museum Center closed in 2016 for a major two-year, 228-million-dollar renovation.

The museums reopened in 2018 with a gala event. In 2019 the Holocaust and Humanity Center opened in the newly renovated Museum Center, featuring many artifacts and exhibitions about local survivors of the Holocaust. The Museum Center received more than 1.8 million visitors in 2019, making it the largest cultural attraction in the region. Today this magnificent Art Deco masterpiece is poised to be a center of activity and education for years to come.

J. Miles Wolf is an artist, photographer, and publisher living in Cincinnati. He has published nine books and loves photographing architecture. He has been drawn to Art Deco architecture for many years.

All Photos: J. Miles Wolf © 2021



OPPOSITE PAGE:
TOP LEFT: 30-foot-tall façade bas-relief sculpture by Maxfield Keck.

TOP RIGHT: Cincinnati Union Terminal façade with landscaped approach featuring a large, cascading water fountain.

BOTTOM LEFT: Rotunda with 106-foot-high ceiling and 10-story arched wall of windows.

BOTTOM MIDDLE: Detail of mosaic by Winold Reiss featuring a riverboat captain.

BOTTOM RIGHT: Detail of mosaic by Winold Reiss featuring a construction worker.

THIS PAGE TOP TO BOTTOM:
Boardroom featuring original table, cork and wood walls, as well as a cork floor.

Lobby for Women's restroom with cut linoleum mural by Pierre Bourdelle.

President's office featuring original desk, inlaid wood walls, and cork floor by Pierre Bourdelle.

EXPLORING DECO IN . . . LOWER MANHATTAN'S WEST SIDE

BY MATTHEW A. POSTAL

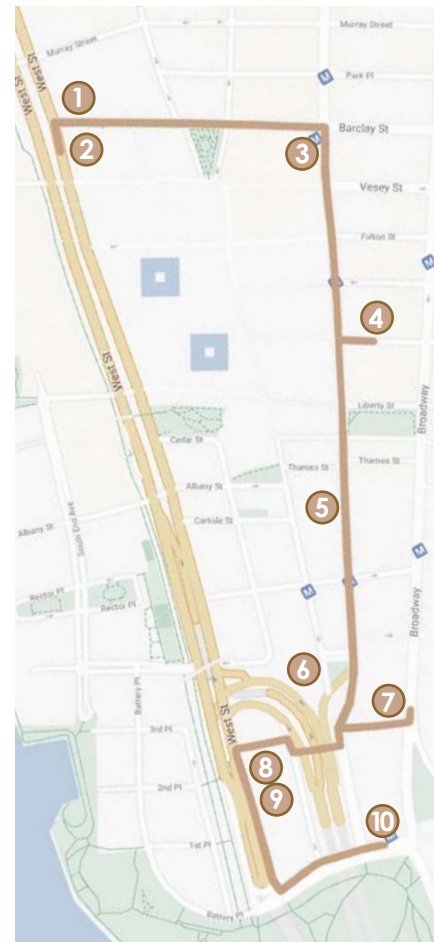
Lower Manhattan has many superb Art Deco buildings. While most tours emphasize the area in and around Wall Street, this route highlights the blocks to the west, where streets that once led to the Hudson River are now separated from the waterfront by Battery Park City. While some of our stops, such as the American Stock Exchange on Trinity Place, have a direct connection to Wall Street, other structures were commissioned to serve the financial industry and those who worked in it.

Fashion and city regulations shaped these buildings' design. In 1916, a significant new zoning resolution specified where certain types of buildings could be erected, as well as their general architectural form. To increase sunlight and improve air circulation, floors were required to step or set back, diminishing in volume until they covered just 25% of the site. It is because of such rules that many Art Deco buildings are compared to ziggurats and wedding cakes. There is, of course, marvelous ornamentation to be savored en route—trimming the setbacks, around the entrances, and in the lobbies. Of particular interest is the elegant marble hall that leads to the post office at 90 Church Street and the well-preserved lobbies inside 29 Broadway and 21 West Street.

Our route covers ten stops at celebrated buildings and lesser-known gems. You'll see one of the first Art Deco buildings in the United States, several richly decorated office towers, a skyscraper clubhouse, a monumental bank, and even a streamlined parking garage. Explore and enjoy!

Matthew A. Postal is an architectural historian and tour guide who leads walking tours throughout New York City. Specializing in nineteenth and twentieth century architecture, he teaches graduate courses at the New York School of Interior Design.

All Photos: © Andrew Garn



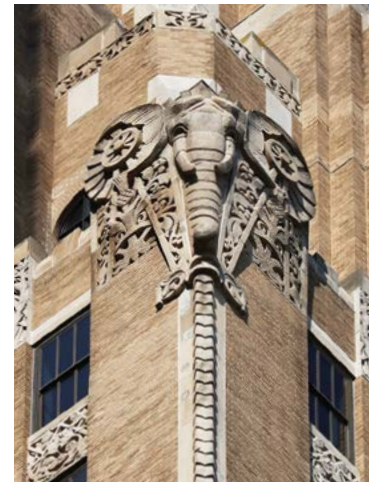
1. 125 Barclay Street

The former World-Telegram Building, designed by the Ohio firm Howell & Thomas in 1930–32. Embellished with decorative brick and brightly colored medallions, it is now occupied by District Council 37, a municipal union.



2. 140 West Street

The Barclay-Vesey Building was constructed as the headquarters of the New York Telephone Company in 1923–27. Designed by Ralph Walker of McKenzie, Voorhees & Gmelin, it's considered one of the first Art Deco buildings in the United States.



3. 90 Church Street

Designed by Cross & Cross, this Federal Building dates to 1933–37. Reflecting the building's purpose, the ornamentation of the limestone façade incorporates stars and stripes, in addition to monumental stylized eagles.





4. 22 Cortlandt Street

Built in 1934 as the main office of the East River Savings Bank, this impressive structure was designed by Walker & Gillette. The somewhat somber Cortlandt and Dey Street portals incorporate deep arches and ornate metal doors.



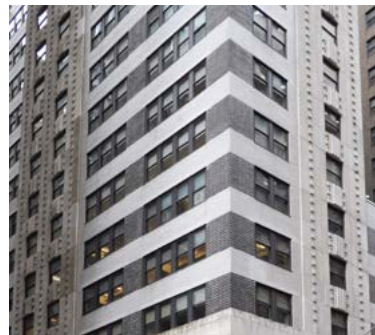
5. 86 Trinity Place

Starrett & van Vleck designed the former American Stock Exchange in 1929–31. Stylized reliefs depict the various industries whose stock brokers once traded here.



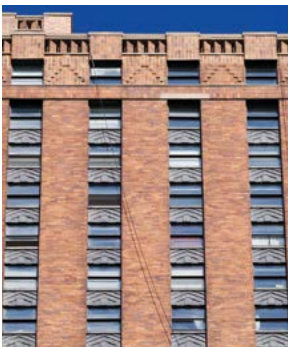
6. 70 Greenwich Street

Despite a late date of 1948–50, this sleek, streamlined parking garage will certainly appeal to fans of Art Deco. It was designed by Singstad & Kehart, engineers of the Brooklyn-Battery Tunnel.



7. 29 Broadway

This slender white brick tower was built by Sloan & Robertson in 1929–31. Entered through an open vestibule wrapped in marble, mosaics, and aluminum detail, the blocklong lobby features one of Manhattan's most impressive mailboxes.



9. 19 West Street

Shown on the left of the group picture and in the detail above. Celebrated by the architect Rem Koolhaas in his 1978 book *Delirious New York*, the former Downtown Athletic Club was designed by Starrett & van Vleck in 1929–30.



8. 21 West Street

Shown on the right of the group picture and in the detail below. Designed by Starrett & van Vleck to complement the neighboring athletic club, this 1931 skyscraper has a colorful brick façade and retail arcade with distinctive stepped arches.



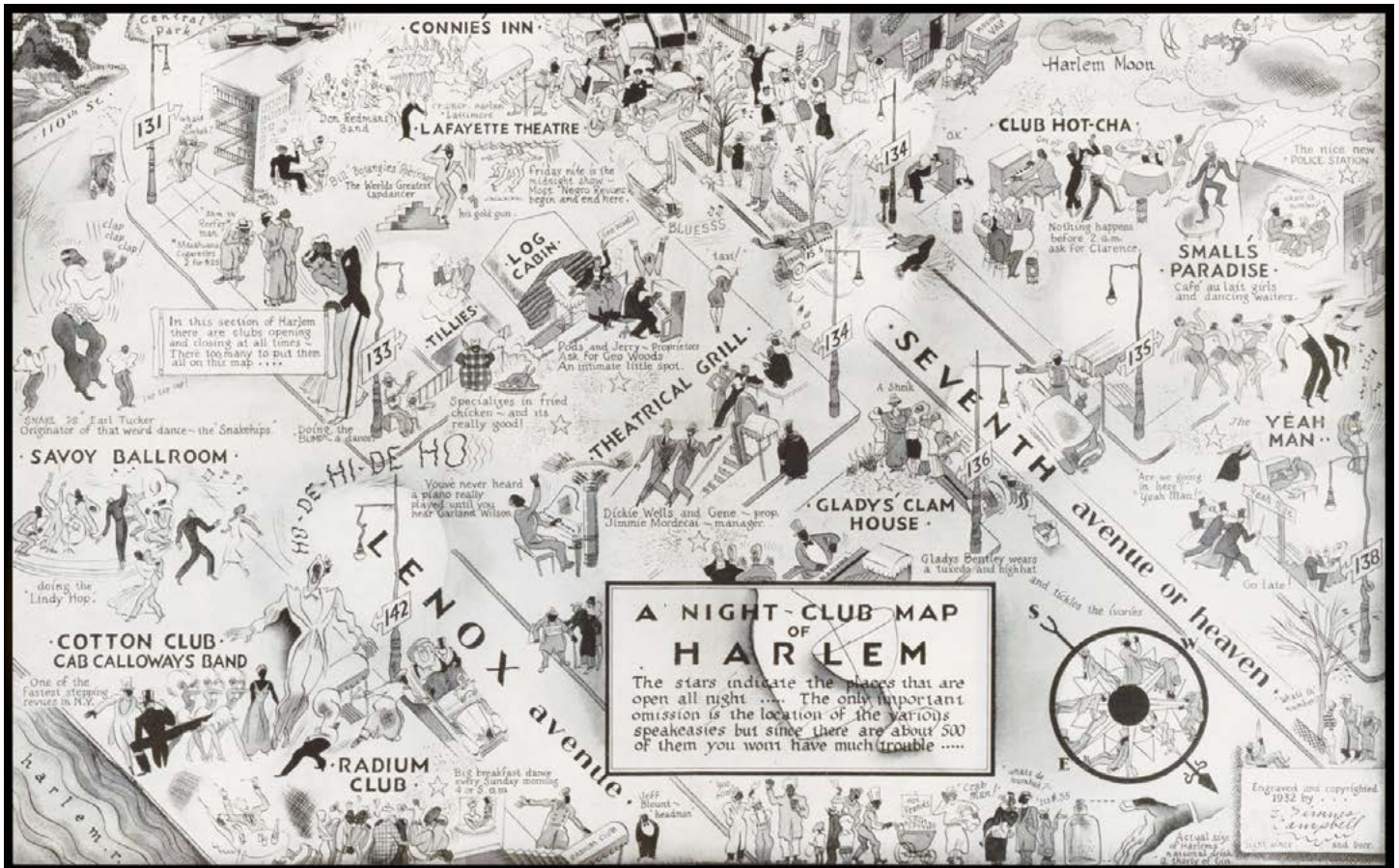
10. Battery Place between Greenwich Street and Washington Street

The Brooklyn-Battery Tunnel's Moderne-style ventilation tower, designed by Aymar Embury in 1949–50, displays three ten-foot aluminum squares by Paulanship, sculptor of *Prometheus* at Rockefeller Center. Commissioned for the New York Coliseum in 1956, these 1,500-pound reliefs were relocated circa 2000.

THE JAZZ AGE: ILLUSTRATING HARLEM

BY JOHN T. REDDICK

Over the last several years, I have been researching a book focused on Harlem's Black and Jewish music culture from 1890 to 1930. As I went about establishing musical timeframes and the evolution of careers, I found one of the best ways to acquire information was through collecting sheet music to establish and document varied and interconnected relationships. Those efforts revealed nineteenth century African American links to Tin Pan Alley and associated theatrical producers of the era who also lived or had theaters in Harlem. These pivotal relationships also clarify the role Harlem played in facilitating the interplay between Blacks and Jews in music, theater, and film early in the twentieth century. An even more exceptional surprise came as I began to take note of the cover art on sheet music and saw how, like the American songbook itself, it began to evolve beyond early stereotypical images and points of view. Equally fascinating was discovering how many of those illustrators also lived and worked in Harlem. That revelation opened my eyes to the effect their proximity and observation of the area's rising Black jazz culture had in shaping their art and point of view on African American life.



E. (Elmer) Simms Campbell (American, 1906–1971)

Perhaps the most vibrant, evocative, and informative image of Harlem's 1930s jazz era and speakeasy culture is not a painting, a photograph, or a single line of prose from Harlem Renaissance literature, but an illustrated map, a metaphorical Rosetta Stone of Harlem's club scene, lingo, and period entertainment, created by the illustrator E. Simms Campbell in 1932. Campbell, an African American artist, was born in St. Louis, though his family soon moved to Chicago, where he attended Englewood Technical Prep Academy, later took classes at the University of Chicago and went on to earn a degree at the Chicago Art Institute. Campbell moved to New York in 1929 and found work contributing art to a variety of magazines while also taking classes at the National Academy of Design. He became a pal and an intimate friend of the Black musical performer, Cab Calloway, who provided Campbell with an insider's view of Harlem's 1930s nightlife. That knowledge, in partnership with his artistic talent and cartoonist's skills, were used to full

advantage when he was commissioned in 1932 to produce *A Night-Club Map of Harlem* for the fledgling and short-lived publication, *Manhattan: A Weekly for Wakeful New Yorkers*. Witty and informative, the map directs the outsider to local nightspots, but it's also filled with insider details that a streetwise Harlemit would recognize. The trajectory of Campbell's career and the focus of his work would be influenced by another friend and colleague, the cartoonist and illustrator Russell Patterson, whose stylish flapper illustrations were as celebrated and influential in the 1920s and 30s as the Gibson Girl had been in the decades before. Patterson encouraged Campbell to focus his cartooning talents on what he called "good girl art," a creation of the lithe, full-breasted, long-legged white American goddess that Patterson himself had celebrated. To that end, Campbell created *Harem Girls*, a cartoon series, which appeared in the 1933 debut issue of *Esquire*. He would also create the magazine's poppy-eyed mascot, Esky, and continue to contribute cartoons to every issue until 1958, making

Campbell the most successful African American cartoonist and illustrator working in the American print and advertising media of his day. That also meant his art focused on serving the nature and audience of his clients, with his cartoons and illustrations for *Esquire* and other mainstream publications seldom depicting African Americans outside stereotypical situations or professional roles. Even in his work for Black magazines and newspapers like *Ebony* and *A Journal of Negro Life*, and *The Chicagoan*, Campbell would never again capture the vibrant, celebratory energy of his Harlem club map, or its joyous depiction of African American life and its sense of community.

Al Hirschfeld, (American, 1903–2003)

Like Campbell, Al Hirschfeld was a child of St. Louis, where he demonstrated an early artistic talent—so much so that his parents were motivated to move to New York, where they felt he would have greater creative opportunities. The family settled in Harlem, where Hirschfeld attended the Vocational High School for the Arts and took classes at the National Academy of Art, along with his schoolmate and friend Sidney Lefkowitz. As they entered their senior year, the vocational school required students to seek professional experience, and this led to Hirschfeld's initial employment as a gofer in the art department of Goldwyn Pictures. Soon after, however, Goldwyn's director of publicity and advertising, Howard Dietz (a soon-to-be-famous lyricist and director), spotted Hirschfeld's drawing talent and began to give him regular movie illustration assignments for the company's magazine and newspaper ads. That job was followed by several freelance assignments, which led to work at Selznick Pictures; at 20, Hirschfeld became the studio's art director in 1923. But the work at Selznick was boom and bust, and soon Hirschfeld found himself unpaid, unemployed and in debt. With little on the horizon, he attended a party at the home of the writer, photographer, critic, and New York gadfly, Carl Van Vechten, who was then the reigning cultural arbiter and connecting link between Harlem Renaissance talent and the creative downtown elite. At the party Hirschfeld met the newly arrived Mexican artist Miguel Covarrubias, and they became fast friends. Mutually admiring each other's talent, they soon began sharing a work studio. Van Vechten touted Covarrubias's talents to the leading celebrities and publications of the day, which helped to introduce Hirschfeld to that circle as well. Beyond their talent and shared artistry, Covarrubias, Hirschfeld, and the German artist Winold Reiss were equally passionate about political thought, Harlem, and Harlem life, and they all became artist chroniclers, documenting the neighborhood players and everyday African American life. So engaged and respected were

they among the community's literary circles that they contributed illustrations to numerous Black publications. Reiss and the African American artist Aaron Douglas provided illustrated images for Alain Locke's *The New Negro* in 1925. Covarrubias provided art for the cover of Langston Hughes's *Weary Blues* in 1926 and had his own book, *Negro Drawings*, published the following year. In 1929 Hirschfeld was hired by MGM to produce a promotional pre-production image for the film *Hallelujah*, an early talkie with an all-Black cast. For the assignment, Hirschfeld created a vibrant image of an African American singer-dancer and musicians, in an effort to stimulate excitement among movie distributors and raise their expectations for

what was to be a racially groundbreaking film. Having lived in and around Harlem most of his life, in 1941 Hirschfeld produced a portfolio of lithographs, *From Harlem as Seen by Hirschfeld*, that chronicled Harlem's culture, community, and diversity through Hirschfeld's iconic imagery.

Sydney Leff (American, 1901–2005)

Sydney Lefkowitz, born and raised in Brooklyn, trekked to Harlem daily as a teenager to attend the Vocational High School for the Arts, where Al Hirschfeld was his classmate. Together they would take classes at the National Academy of Art, and they remained lifelong friends and colleagues. Lefkowitz began to take on freelance work and started abbreviating his surname to Leff



ELAINE HAMMERSTEIN
A drawing by Hirschfeld from a photograph
by Nicholas Murray of the popular Selznick star



Bill Robinson, whose Tap Dancing Is a Feature of "Blackbirds of 1928,"
at the Liberty.



OPPOSITE PAGE:

E. Simms Campbell, *A Nightclub Map of Harlem*, *Manhattan Magazine*, 1932.

THIS PAGE:

TOP LEFT: Al Hirschfeld, Elaine Hammerstein, Selznick Pictures, c. 1922.

TOP RIGHT: Al Hirschfeld, Drawing of tap dancer, actor, and singer Bill Robinson for *Blackbirds of 1928*.

BOTTOM: Al Hirschfeld, Promotional pre-production image for the MGM film *Hallelujah*, King Vidor, Director, 1929.

when signing his artwork. Unlike Hirschfeld, whose early work experience led him into the motion picture business, Leff moved into the music business when he answered an ad for an illustrator placed in 1923 by the songwriter Sam Coslow. Irving Berlin, then America's leading songwriter, took a liking to his work and its simple style, and soon Leff was providing calligraphy and illustrations for two of Berlin's 1927 hits, "Me and My Shadow" and "Blue Skies," written for the singer Belle Baker, who was then starring in Rodgers and Hart's first musical, *Betsy*. Baker demanded that the show's producer, Florenz Ziegfeld, engage Berlin rather than the neophytes to compose a show-stopping song for her. For the aforementioned film *Hallelujah*, Berlin composed "Swanee Shuffle," with the sheet music's cover illustration clearly drawing upon Hirschfeld's earlier promotional image for the movie. Though no artist is credited on the cover, and since it's a Berlin song, the image was most likely drawn by Leff, interpreting Hirschfeld's illustration. During this period, Leff's work generated a new vitality, and he showed a greater sophistication in his depiction of African American performers. Hirschfeld's style and influence remain evident in Leff's bold reinterpretation of the dancing figure in his cover art for "Underneath the Harlem Moon" in 1932. In his illustration for Fats Waller's popular tune "Ain't Misbehavin'," Leff presented the chorus line of *Connie's Hot Chocolates* with all the glamour and attitude of Josephine Baker; the once prerequisite watermelon image is cleverly disguised and graphically rendered in green and red as a stage floor and parted curtains. It is clear as well in Leff's artwork for the Cotton Club's *Rhyth-Mania* that he frequented the clubs and watched performances firsthand, picking up nuanced details, the dancers' angularity and their high-stepping movements, while also conveying the fashionable

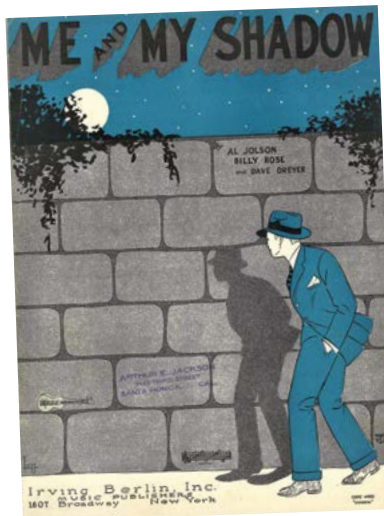
way they were being presented. Beginning in the 1920s and going through the 30s, Leff designed and drew covers for more than 1,000 songs. He was a popular favorite of the composers Duke Ellington, Andy Razaf, and Harold Arlen, and of the venues that produced and presented their music, like Harlem's Cotton Club and Connie's Inn. Such enduring musical standards as "Sophisticated Lady," "Stormy Weather," "Sweet Georgia Brown," and Cab Calloway's "Minnie the Moocher" can all lay claim not only to those mythic Jazz Age venues, but to the distinction of a Sydney Leff cover as well.

John T. Reddick is Director of Community Engagement Projects for the Central Park Conservancy and a Columbia University Community Scholar. An enthusiastic resident of Harlem and scholar of its history, Reddick is at work on a book exploring Harlem's Black and Jewish music culture from 1890 to 1930, from which the subject of this article is drawn.

All Photos: From the collection of the author

Sources:

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- E. Simms Campbell. "Black Publications" in *American Art Archives* online. <http://www.americanartarchives.com/campbell,es.htm>
- No author, 1971. *New York Times*, "Obituary," January 29, 40.
- David Leopold, ed. 2015. *The Hirschfeld Century: Portrait of an Artist and His Age*. New York: Albert A. Knopf.
- Steven Offinoski, 2003. *African American Artists in Visual Arts*. New York: Facts On File, Inc.
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TOP ROW LEFT TO RIGHT:
Sidney Leff, "Me and My Shadow," 1927.

Sidney Leff, "Blue Skies," 1927.

Sidney Leff, "Swanee Shuffle," 1929.

Sidney Leff, "Underneath the Harlem Moon," 1932.

BOTTOM ROW LEFT TO RIGHT:
Sidney Leff, "Ain't Misbehavin'," 1929.

Sidney Leff, *Rhyth-Mania*, 1931.



SONIA DELAUNAY: INNOVATION AND THE INTERWAR YEARS

BY MARYANN DE JULIO

Sonia Delaunay was a multidisciplinary abstract artist and a key figure in the Parisian avant-garde in the early twentieth century. Alongside her husband, Robert Delaunay, she pioneered the movement Simultanism. Her exploration of the interaction between colors created a sense of depth and movement throughout her extensive body of work.

Sonia Delaunay's vivid use of color and her inventive bold abstract patterns can be traced to her childhood in Russia and to her familiarity with traditional folklore. Born Sarah Stern in Gradizhsk, Ukraine, on November 14, 1885, she was adopted in 1890 by her maternal uncle, Henri Terk, and grew up in St. Petersburg, where Terk was a lawyer who could afford to give her a culturally rich childhood. With her uncle's family she visited the Hermitage and traveled through Europe, where she visited important museums including the Uffizi in Florence, Italy; the Pinakothek in Munich, Germany; and the Kunsthistorisches Museum in Vienna, Austria.

She moved to Germany in 1904 to study drawing at the State Academy of Fine Arts Karlsruhe, and in 1906 she traveled to Paris, where she attended art classes at the Académie de la Palette, learning printmaking. Frequenting galleries and exhibitions in Paris, she became familiar with the work of Paul Cézanne, Vincent van Gogh, Pierre Bonnard, and Edouard Vuillard, as well as Fauvists Henri Matisse and André Derain.

During her first year in Paris, Sonia met Wilhelm Uhde, a German collector and art dealer, whom she married on December 5, 1908. Through Uhde's Galerie Notre-Dame-des-Champs in Montparnasse, which gave Sonia her first solo exhibition, she met Pablo Picasso, Georges Braque, Maurice de Vlaminck, and Robert Delaunay. After divorcing Uhde by mutual agreement, she married Delaunay in 1910. In January 1911, Sonia and Robert Delaunay's son, Charles, was born. The colorful patchwork quilt that Sonia made for his cradle is her first abstract work; crafted of 70 rectangular and triangular pieces reminiscent of the bits of fabric she had seen in blankets in Russian peasants' homes, it figures prominently in recent retrospectives of her work: *Sonia Delaunay: Les Couleurs de l'abstraction*, at the Musée d'art moderne de la ville de Paris, and *The EY Exhibition: Sonia Delaunay* at Tate Modern in London.

The Delaunays were on vacation in the Basque town of Fuenterrabía on the border of France and Spain when Germany declared war on France in August 1914, and they did not return to Paris until after 1920. Travel to Madrid and to the villages of Vila do Conde and Valença do Minho in Portugal inspired Sonia to paint market scenes and flamenco singers; she said living on the Iberian Peninsula had opened her eyes to the very origin of light. In Madrid, Sonia began her work in interior decoration at her boutique, Casa Sonia, in addition to fashion and costume design to support her household when financial support from family properties in St. Petersburg ceased with the outbreak of the Russian Revolution in 1917. Sergei Diaghilev, founder of the Ballets Russes, commissioned her to design costumes for the London production of his ballet *Cléopâtre* (1918) and Robert to design the stage sets after the originals were destroyed in a fire during a 1917 tour in Latin America.

Upon their return to Paris, the Delaunays frequented avant-garde circles, opening their home to Marc Chagall, Man Ray, Tristan Tzara, Philippe Soupault, Louis Aragon, André Breton, and Vladimir Mayakovsky. Sonia set up a design studio in their apartment, employing Russian émigrée seamstresses to make scarves, dresses, and embroidered Simultanist coats. Sonia's interest in simultaneous contrast—the influence of one color on another, how color contrasts suggest movement—dates from her early career, when she and Robert first pursued the study of color, influenced by theories of the French chemist Michel-Eugène Chevreul. She designed the fabrics, which she sold to textile firms or produced on her own. In 1925, she opened her own fashion house, Maison Delaunay, whose garments were adapted to the rhythms of modern life and offered women freedom of movement.



TOP LEFT: Sonia Delaunay wearing Casa Sonia creations, Madrid, c.1920.

TOP RIGHT: Quilt cover stitched for her son Charles, 1911.

BOTTOM: *Market at Minho*, oil and wax on canvas, 1915.



LEFT TO RIGHT:
Simultaneous Dresses (Three Women, Forms, Colours), oil on canvas, 1925.

Woolen embroidered coat made for Gloria Swanson, 1924.

The 1925 Paris Exposition internationale des arts décoratifs et industriels modernes provided Sonia Delaunay with her fashion breakthrough: she presented her creations there in her *Boutique Simultané*, which she designed and decorated, set up on the Pont Alexandre III, and ran with the help of Jacques Heim, a prominent couturier and furrier who had suggested she make fur coats in geometric patterns. For Delaunay, there was no difference between her painting and her decorative art, which she viewed as the application of her research expanded into new domains. She first met Joseph de Leeuw, director of the Amsterdam department store Metz & Co., at the 1925 Exposition; Metz & Co. became a major customer and commissioned her textile designs for its own production from 1930 to 1934. One of the many orders that resulted from Sonia's presentation at the Exposition was a woolen embroidered coat for the American film star Gloria Swanson. The Wall Street stock market crash in October 1929 forced Sonia to close her unprofitable *Maison*, but she continued to create and sell fabric designs under her trademark *Tissus Delaunay*.

During this time Sonia created her *Simultaneous Dresses*, a mix of squares and triangles of taffeta, tulle, flannelette, moiré, and corded silk. In the 1920s, she launched her famous *Poem-Dresses*, words and colors in ever-new relationships through body movement, with her friend Tristan Tzara, the Dadaist poet. Because of the brightly colorful abstraction, Sonia Delaunay's fabric patterns and carpet designs on display at the Exposition were characterized as "an extremely modernist branch of Art Deco."¹

Sonia's textile designs included checks, blocks, stripes, circles, abstract shapes, and flowers. Some flower motifs recall folk art, while others reflect the stylized visual language of Art Deco. Red, green, blue, black, and white were the hallmark colors of her palette, though she sometimes used pastel hues in combination, or strong colors mixed with soft or somber tones.² Through her fabrics, which were exercises in color, Sonia made modern art a part of daily life.

Renowned for her fabrics and clothing, Sonia was invited to deliver a lecture at the Sorbonne on January 27, 1927, where she introduced the revolutionary concept of *prêt-à-porter* (ready-to-wear), based on the *tissu-patron* (fabric pattern) standardization that allowed simultaneously printing the pattern of the dress and its corresponding textile design, patented by Robert Delaunay, and first executed by Sonia in collaboration with the *Maison Redfern*. In 1936, the Delaunays joined with a collective of architects

and 50 unemployed artists commissioned to prepare murals for the 1937 Exposition internationale des arts et techniques dans la vie moderne, backed by Léon Blum's Popular Front (anti-fascist) government (1936–1938). Sonia and Robert painted murals for two temporary exhibition buildings, the *Palais de l'Air* and the *Pavillon des Chemins de fer*. *Portugal*, which Sonia painted for the temporary railroad exhibition pavilion, was awarded a gold medal and acquired by the French government.

The Delaunays were ardent promoters of abstract art: they became members of the Abstraction-Création group in 1931, formed as an alternative to the figurative tendencies of André Breton's Surrealists, and in 1939, they helped organize the first *Salon des Réalités Nouvelles*, which promoted formal purity and non-objectivity in art. As the Germans approached Paris in June 1940, Sonia and Robert left the region for the unoccupied south of France. After Robert died of cancer in October 1941, Sonia joined Jean Arp and Alberto Magnelli and their families in Grasse. Continuing to support abstract art, she worked to reestablish Robert's reputation with a number of exhibitions of his work and bequests of his work and hers to public institutions. In 1964, she became the first living woman artist to have a retrospective, *Donation Delaunay*, at the Louvre, thanks to her donation of 117 works by herself and Robert.

By the time Sonia Delaunay died at home in Paris on December 5, 1979, she had received the Légion d'honneur in 1975 for her contribution to French art and design.³ From the beginning, her radically new creations in multiple media stood out among the Russian émigré community in Paris. She came full circle with the display of her art at the 1979 exhibition *Paris-Moscow, 1900–1930* at the Centre Pompidou, to which she had donated her entire body of graphic work. Sonia once said in a television interview, "I always changed everything around me . . . I have done everything. I have lived my art."⁴

Maryann De Julio is a professor in the Department of Modern and Classical Language Studies at Kent State University, Ohio. She writes on literature and the other arts and is a translator of French and Italian literature.

Endnotes:

1. Norbert Wolf, *Art Deco* (Munich: Prestel Verlag, 2013), p. 169.
2. Petra Timmer, "Sonia Delaunay: Fashion and Fabric Designer," in *Color Moves: Art and Fashion by Sonia Delaunay*, Matilda McQuaid and Susan Brown, editors (New York: Cooper-Hewitt, Smithsonian National Design Museum, 2011), pp. 50–51.
3. In 1964, Sonia Delaunay was named Chevalier of the Légion d'honneur; in 1975, she was promoted to Officer.
4. Television interview for *Spectrum*, Westdeutscher Rundfunk, October 29, 1967.

CALENDAR

A reminder to our readers:

Please note that because of Covid-19, dates and admissions to exhibitions and events may change to reflect safety considerations. Make sure to consult the websites included in each listing for the most current information.

EXHIBITIONS

JAN 9 **Roaring Twenties: The Life and Style of Marjorie Merriweather Post**
Hillwood Estate Museum
Washington, DC
HillwoodMuseum.org

JAN 22 **The Secret Paris of the 1930s: Vintage Photographs by Brassai**
Washington County Museum of Fine Arts
Hagerstown, MD
WCMFA.org

JAN 23 **Designing the New: Charles Rennie Mackintosh and the Glasgow Style**
Albuquerque Museum
Albuquerque, NM
CABQ.gov/ArtsCulture/Albuquerque-Museum

JAN 23 **Georgia O'Keeffe, Photographer**
Museum of Fine Arts Houston
Houston, TX
MFAH.org

JAN 30 **The New Woman Behind the Camera**
National Gallery of Art
Washington, DC
NGA.gov

JAN 30 **Surrealism Beyond Borders**
Metropolitan Museum of Art
New York, NY
MetMuseum.org

FEB 6 **Daring Design: The Impact of Three Women on Wharton Esherick's Craft**
Michener Art Museum
Doylestown, PA
MichenerArtMuseum.org

FEB 18 **André Kertész: Postcards from Paris**
High Museum of Art
Atlanta, GA
High.org

FEB 19 **Frida Kahlo, Diego Rivera, and Mexican Modernism**
Portland Museum of Art
Portland, OR
PortlandArtMuseum.org

FEB 21 **Man Ray: The Paris Years**
Virginia Museum of Fine Arts
Richmond, VA
VMFA.Museum

FEB 21 **Grosvenor School Linocuts**
Art Gallery of Ontario
Toronto, Ontario, Canada
AGO.ca

FEB 27 **A Landmark Repurposed: From Post Office to Art Museum**
Frist Art Museum
Nashville, TN
FristArtMuseum.org

MAR 8 **Imogen Cunningham: A Retrospective**
Getty Center
Los Angeles, CA
Getty.edu

MAR 12 **Sophie Taeuber-Arp: Living Abstraction**
Museum of Modern Art
New York, NY
MoMA.org

MAR 13 **Austrian and German Art: 1890–1940**
Neue Gallery
New York, NY
NeueGallery.org

MAR **Women and Abstraction, 1930–1950**
Whitney Museum of American Art
New York, NY
Whitney.org

APRIL 10 **Underground Modernist: E. McKnight Kauffer**
Cooper Hewitt Smithsonian Design Museum
New York, NY
CooperHewitt.org

APRIL 24 **Modern Posters, 1900–1940**
High Museum of Art
Atlanta, GA
High.org

MAY 14 **Cartier and Islamic Art: In Search of Modernity**
Dallas Museum of Art
Dallas, TX
DMA.org

JULY 2 **Soviet Propaganda Posters from between the World Wars**
Portland Museum of Art
Portland, OR
PortlandArtMuseum.org

JULY 8 **Unlocking an Art Deco Bedroom by Joseph Urban**
Cincinnati Art Museum
Cincinnati, OH
CincinnatiArtMuseum.org

OCT 2 **Modern Women/Modern Vision**
Crocker Art Museum
Sacramento, CA
CrockerArt.org

OCT 7 **Black Orpheus: Jacob Lawrence and the Mbari Club**
Chrysler Museum of Art
Norfolk, VA
Chrysler.org

EVENTS

JAN 23 **Forty Years of Celebrating New York City Art Deco**
Art Deco Society of New York
Online
ArtDeco.org

JAN 14 **Art Deco Weekend: Art Deco Celebrates the Radio**
Miami Design Preservation League
Miami Beach, FL
ArtDecoWeekend.com

JAN 29 **Liu Jipiao and the Birth of Chinese Art Deco**
Art Deco Society of New York
Online
ArtDeco.org

JAN 20 **Winter Antiques Show**
Park Avenue Armory
New York, NY
TheWinterShow.org

FEB 12 **Paris-New York: Design Fashion Culture 1925-1940**
Art Deco Society of New York
Online
ArtDeco.org

FEB 16 **Napier Art Deco Festival**
Art Deco Trust
Napier, New Zealand
ArtDecoNapier.com

FEB 22 **Durban Art Deco**
Art Deco Society of New York
Online
ArtDeco.org

MAR 9 **Women of Art Deco Design Part II**
Art Deco Society of New York
Online
ArtDeco.org

MAR 27 **Robert Mallet-Stevens: The Most Elegant French Modernist, 1920–1940**
Art Deco Society of New York
Online
ArtDeco.org

MAY 14 **Avalon Ball**
Art Deco Society of Los Angeles
Santa Catalina Island, CA
ArtDecoLA.org



A dynamic collection of Claudius Linossier dinanderie, artfully displayed on a Raymond Subes table

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