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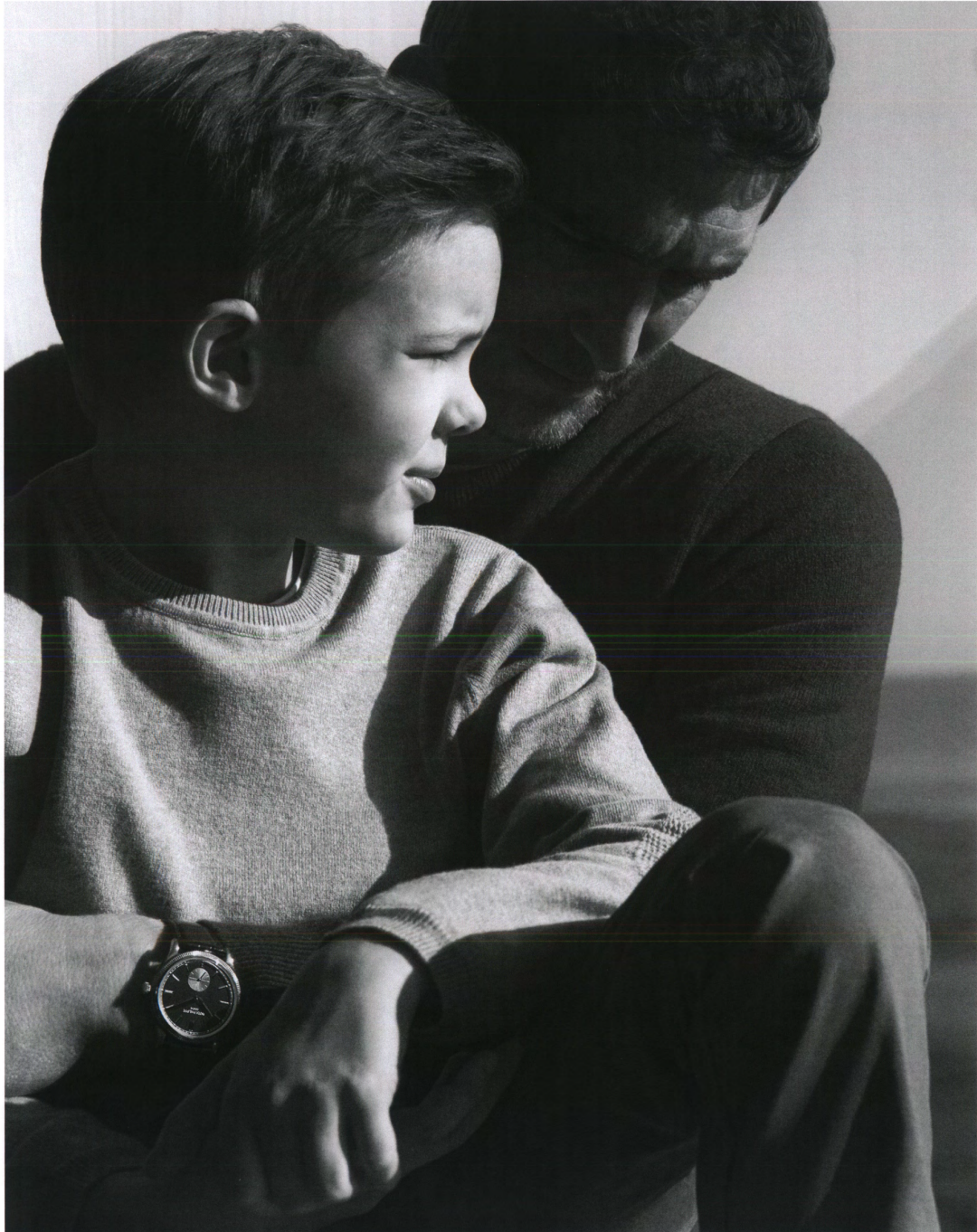
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VOLUME IV NUMBER 12



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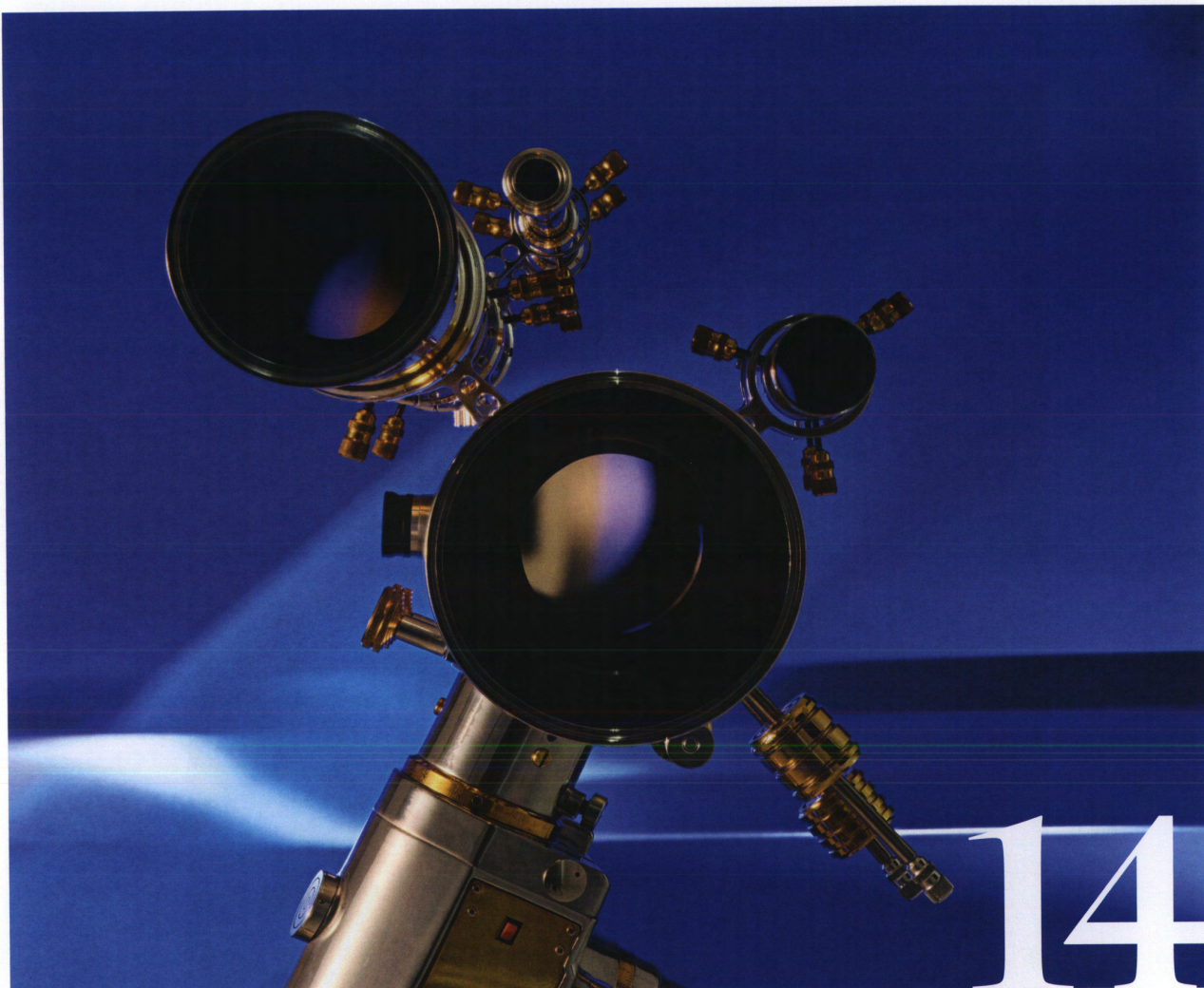


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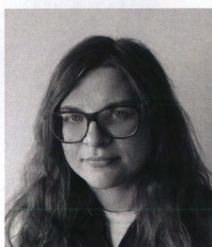
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Cover: the Cameroonian designer Serge Mouangue created this kimono in *bogolan* fabric from Mali as part of a collection

that melds Japanese and West African textile techniques. He combines traditional styles from each culture, forming a new aesthetic that reflects the similarities and differences between these two regions. The kimonos were photographed by Silvia Draz, whose experience of shooting diverse fashion content emphasizes the extraordinary details of Mouangue's vibrant creations

Contributors

Moving from her homeland, Lithuania, to study photography at the UK's University of Central Lancashire, **Silvia Draz** later settled in London, where she was able to hone a refined and eclectic style in her work. The images she captures champion positivity and diversity, and on page 44, her subjects are the sumptuously patterned African-Japanese kimonos of Serge Mouangue.



Based in London, **Jake Curtis** is an award-winning photographer whose meticulously and scientifically crafted lighting ensures a unique and timeless aesthetic for the subjects that he works with. This photographic style is beautifully rendered on page 5 in Jake's atmospheric shots of precious Japanese wadokei timepieces that were used to tell the time during Japan's Edo period.

Waldemar Januszczak is the chief art critic of the *Sunday Times* in London. Before that he was the art critic of the *Guardian* and the Head of Arts at Channel 4 Television. He has twice won the Critic of the Year award and is also a prolific filmmaker, having conceived of more than 40 films on art. Waldemar lives in London with his wife, the Japanese artist Yumi Katayama. The color green's prevalence and importance in art is his chosen subject on page 50.



Leon Chew is a British photographer with a strong interest in developing imaging technologies. He works from a studio in London, splitting his time between direct commissions and his own art practice. Leon's striking shots of handmade, bespoke telescopes on page 14 transport us to another world.



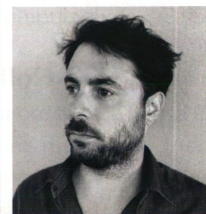
Judith Benhamou-Huet writes the art-market column for the French business daily *Les Echos*. She was also the co-curator of the exhibition *Richard Serra, Georges Seurat: Drawings* at the Guggenheim Bilbao Museum in Spain. On page 44, Judith celebrates the rich duality of the designer Serge Mouangue's dynamic African-Japanese kimonos.



As one of Austria's most popular authors, **Franzobel's** work includes novels, plays, and children's books. *The Raft of the Medusa*, about the historic ship tragedy off Senegal's coast, was shortlisted for the German Book Prize in 2017 and has been translated into eight languages. A decadent goldsmith's masterpiece that is now housed in Dresden Castle has a fascinating story, he finds on page 64.



Currently teaching the history of photography at Milan's IED design school, **Giulio Ghirardi** developed his own craft by working with an impressive client list that includes Luca Guadagnino (the Italian film director), Dior, and the *New York Times*. For *Patek Philippe* magazine, he visited a sixteenth-century grotto in Italy (page 24).



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STORY Nicholas Foulkes
PHOTOGRAPHS Jake Curtis

We take for granted that our twenty-four-hour days are made up of twenty-four hours of equal length, but it was not always so everywhere. In Edo-period Japan, there was a different way of telling the time, which necessitated the development of a timekeeper that could count according to entirely different rules – the wadokei



It is not often that the very beginning of historical eras can be pinpointed, but the period known to historians of Japan as the “Christian Century” began on Monday, August 15, 1549, with the arrival of the Jesuit priest Francisco Xavier in the Japanese port of Kagoshima, southern Kyushu.

As well as the word of God, he brought with him a great European invention. Among the gifts that Xavier presented to the local lord was that technological marvel of Renaissance Europe, the mechanical clock. Despite it being an alien object from a faraway culture, the clock so entranced Yoshitaka Ouchi, the lord of Suo Province (today’s Yamaguchi prefecture), that he rewarded Xavier with a disused Buddhist monastery in which to practice his religion and make converts. The teachings of Christ and clockmaking had taken root in Japan. More Christian priests followed, and in around 1600 a school was established by missionaries in Nagasaki that taught, among other things, clockmaking.

But the term “Christian Century” can be misleading inasmuch as it suggests too long an amount of time. In 1603, even as the first watchmakers were graduating from the Nagasaki school, a powerful shogun came to power in the castle town of Edo (which grew into the city now called Tokyo), initiating a period of feudalism named after the town and also called the Tokugawa shogunate. Warring states made peace and submitted to Tokugawa. Foreign influences were rejected, and by 1639 the 90-year-old Christian Century was pretty much over. The Sakoku (closed country) period had begun.

The Tokugawa shogunate had seen what Europe had to offer and on the whole it was not interested, but a passion for timepiece-making had been ignited. One of the few elements of European culture to take hold, indeed flourish, in Edo-period Japan was clockmaking, and it would take an evolutionary path that diverged from the way it advanced in Europe, creating a fascinating

Page 5: some lantern wadokei were set on stands. This black-lacquered, pyramid-shaped one gives the clock an overall height of 4.6 ft. The stand has mother-of-pearl inlays in an inscription on the front and in motifs of birds and sprays of blossom on the sides. The c. 1700 clock has a single foliot balance, a fixed lacquered dial, a revolving

hand, and an engraved silvered-brass case. Above: wadokei feature in these ukiyo-e prints. The title of the print on the left (*Hour of the Dragon from The Twelve Hours of Springtime Amusement*) is written on a cartouche in the shape of a clock on a stand like that on page 5. The right-hand print shows a single foliot balance wall clock

alternative horological culture adapted to an entirely different concept of time.

The clocks that European visitors had introduced adhered to the notion of fixed time being a conceptual framework by which life was ordered, but the Japanese way of understanding and reckoning time was less rigid. During Edo, the time in Japan was told according to the perceived rising and setting of the sun. As the tide of cultural nationalism swept over the archipelagic nation, a new type of mechanical timekeeper



This lantern clock has a four-legged lacquered-wood stand that gives it a height of 2.7 ft, a fixed, lacquered dial, and an engraved brass case. The double foliot balance, seen under the bell, enables adjustments to the speed of counting time. Moving the weights in and out along the foliots shortens or lengthens each *koku* (as the sections of time were called). A double foliot balance was a useful advance on the earlier single version, as it did not need to be adjusted for the change between night and day. All of the wadokei shown on these pages are in the collection of the British Museum in London





was devised. The age of the wadokei had dawned, and this esoteric and uniquely Japanese timepiece would regulate daily life under the shogunate for the next 250 years.

The Edo day did not begin at a time set by a clock, say, midnight, but commenced whenever daylight began. Split between light and dark, the day and the night each comprised six periods of time known as *koku*, which varied in length with the seasonal changes of the duration of the natural day and night.

Japanese clockmakers devised a system whereby the regularity of Western clockwork could be adapted to reflect Edo timekeeping, with the days and nights of irregular length each broken into six equal parts that could be constantly adjusted in length. Thus, at the summer solstice, each of the six nocturnal *koku* would be at their shortest and diurnal at their longest, vice versa at the winter solstice. Using the foliot balance, the counting of time was either slowed down or sped up by moving the regulating weights at the end of the foliot's arm farther apart or closer together. As the length of nocturnal and diurnal *koku* varied

The Edo day did not begin at a time set by a clock, say, midnight, but commenced whenever daylight began

slightly every day, the weights had to be moved twice daily.

As it did in Europe, clockmaking in Japan advanced with time, but it was according to entirely different needs. By the end of the seventeenth century the double foliot balance clock was developed. Capable of switching automatically between daytime and nighttime, it represented an enormous technological leap, reducing the number of human interventions required by the ever-shifting lengths of the *koku*.

When, in time, the foliot balance was superseded by pendulum and spring regulators, more reliable but more difficult to speed up or slow down as the seasons demanded, the simple and elegant expedient of a rail around the dial was introduced,

Above, left: this 11.5-in-high lantern wadokei is a striking clock with an alarm, chapter ring, and calendar aperture. Wadokei with a double foliot balance, as seen here, have regulating weights that can be slotted into numerous positions along the foliot arms to adjust the counting speed. Above, right: this dial, the face of an 8.9-in-tall brass mantel clock with a brass movement and strikework on six bells, includes a calendar aperture, a partly lacquered lunar dial, and a sexagenary cycle indication. The latter is a calendar system that counts

60 terms, each being a year, which was introduced in Japan from China in the sixth century and was in use until the Meiji period commenced in 1868. Originally the clock may have had an indication of the 24 seasons, or *sekki*, but this has been lost. Opposite: bearing the date 1692 on its base, this 14-in-high single foliot lantern clock is the oldest wadokei in the British Museum collection. Single foliot clocks needed adjusting twice a day, as the night *koku* were of a different length from those during the daytime



This small brass mantel clock (left), is only 4.25 in high in its rosewood case. It is a later wadokei clock, in which the foliot balance system has been replaced with a spring regulator, which was more reliable but harder to adjust. So to make fine corrections to koku of different lengths, the clock also has a rotating

dial with movable numerals (see detail above) that can be moved either closer or farther apart as necessary. Opposite: this 7.25-in-tall double foliot mantel clock has a double calendar. The clock has a brass movement with time strike and alarm, and decorative engraved brass plates on the case and turned brass columns

along which the hour markers could be moved farther apart or closer together (as on the wadokei seen above).

There was also another difference from European timekeeping: the 12 koku were generally not numbered but named with the characters of the 12 terrestrial branches of the sexagenary cycle. The branches, by tradition, were also associated with the animals from the zodiac. There were just two fixed times, the hour around midday (associated with the horse) and that around midnight (the branch linked with the rat); the remaining koku bunched up or spread out around the dial as the length of daylight dictated. In a notable divergence from Western timekeeping, it was not the hour around dawn that was associated with the cock or rooster, but sunset, when the bird would be flying home.

By the middle of the nineteenth century, wadokei reached the peak of sophistication with a type of pillar clock that showed the time with an indicator that moved up and down a long dial that occupied the majority of the timepiece. It looked like a Western wall-mounted barometer. And then, on January 1, 1873, time ended...at least the way wadokei told it.

By the end of the 1860s, after almost a quarter of a millennium sequestered from the rest of the world, the shogunate was overthrown and the Meiji emperor restored. Although it spanned just a few decades (from 1868 until 1912), the Meiji period reversed the Edo's isolationist policies and took the whole country on a crash course of modernization. The world beyond Japan had changed greatly since the days of the

forementioned priest, Francisco Xavier. The age of great exploration had given way to the age of colonization, and, emerging from the Edo period, the country faced the shameful prospect of becoming a colony of one or other of the modern, industrially developed military powers, a prospect that could be avoided if Japan itself became a modern, industrially developed military power, too. To achieve that, Japan would need to adopt the time-reckoning system used by the rest of the world.

In 1872, the fifth year of the Meiji period, an imperial edict was issued, replacing the traditional Japanese calendar with the Western solar calendar and decreeing that the method of telling the time also needed to be aligned with the global, international standard, which would additionally "promote the enlightenment of the people."

After more than two hundred years of self-imposed sequestration, Japan had begun a journey that would, within a century, see it become one of the most technically advanced and economically powerful nations on earth. But it would make that journey without the wadokei. ♦





ANATOMY OF A CLASSIC

REF. 5940

The perpetual calendar complication has been the core of notable wristwatches made by Patek Philippe since 1925, but perhaps none has more vintage charm than the cushion-shaped REF. 5940, finds Nicholas Foulkes

The very essence of time is on the wrist of the wearer of a perpetual calendar watch. As well as marking the passing hours, minutes, and seconds, this complication locates those small divisions of time within the context of the solar and lunar calendars. It is the solar orbit of roughly 365.25 days that gives us the span of time we know as the year and that, using the 29.5-day lunar cycle, we divide into 12 months. The mental mathematician will have already calculated that the lunar and solar cycles, while close, are not perfectly aligned, which is why months are of different lengths and why in 46 BC Julius Caesar added an occasional extra day to Februarius (February), making it a 29-day month once every four years.

Conceptually there is something terribly tidy about the idea of hours, minutes, and seconds, along with the solar and lunar cycles and the Julian calendar, all wrapped up in one timepiece that measures a couple of dozen millimeters in height and a few centimeters across. It is a quite remarkable achievement. This watch in effect predicts time, mechanically programmed to display the correct day, date, month, and moon phases for generations into the future, only needing adjustment for accuracy to the Gregorian calendar for every century that is not divisible by four hundred. In the early 1960s, this accomplishment prompted Patek Philippe to describe the REF. 3448 perpetual calendar as “the wonder watch that thinks for itself.”

The perpetual calendar has a special place at Patek Philippe. With the famous model, Movement No. 97 975, created in 1925, the company became the first maker to transfer the perpetual calendar from the pocket to the wrist, and a dozen years later it made the earliest known wristwatch with a retrograde perpetual calendar. Patek Philippe was also the first marque to produce the complication in series, with the REF. 1526 of 1941, and, in the early 1960s, the first to create a self-winding perpetual calendar, the REF. 3448.

It is thus unsurprising that the perpetual calendar also plays a key role in the renaissance of the complicated wristwatch toward the end of the twentieth century with the 1985 launch of the REF. 3940. Fitted with one

of Patek Philippe's most celebrated and beautiful movements (the micro-rotor caliber 240 Q), the dial layout of the REF. 3940 was to establish an enduring visual language for this complication. The day of the week and 24-hour indicators were shown in one sub-dial at nine o'clock; the month and leap year in a sub-dial at three o'clock; and the date and the moon phases at six o'clock.

Building on the foundations laid by the REF. 3940, the marque now has an enviable offering of perpetual calendars: the REF. 5327, which inherited the look of the REF. 3940; the ladies' REF. 7140; the REF. 5160 retrograde calendar with an exquisitely engraved case; the retro-contemporary REF. 5320 with two windows (day and month) in the upper dial; and the recently launched minimalist In-line Perpetual Calendar REF. 5236.

The REF. 5940, however, presents an alternative vision: that of the cushion-shaped perpetual calendar. Although round-cased complications are most readily identified with Patek Philippe, the so-called “form” case

I regard as one of the most attractive designs ever issued by any brand. At the time it proved unpopular and was only issued in small numbers, ceasing production around 2002. The REF. 5040 followed that model into history about seven years later, and, like many, I thought we had seen the end of the cushion-cased perpetual calendar.

So it was a very agreeable surprise to visit the Patek Philippe stand at the Basel fair in 2012 and come face to face with the REF. 5940. As ever with Patek Philippe, small changes garnered great effect. Whereas the REF. 5040 had been 35 mm wide and 43 mm long, at 37 mm by 44.6 mm the REF. 5940's ever so slightly increased size accentuated the already svelte height of 8.5 mm, making the watch seem truly like a wafer.

Everything about the design of the watch was calculated to achieve a sense of grace on the wrist; many hours of hand polishing created a case that appeared to be made of golden light with curved flanks that seemed

Everything about the design of the watch was calculated to achieve a sense of grace on the wrist

is far from neglected, and even though these characterful shapes do not always receive the recognition that they deserve from collectors, Patek Philippe continues to offer them as they are an important part of the heritage of mechanical watchmaking.

The shaped watch is a timepiece for the aesthete. It is remarkable how the same movement carrying out the same function can alter its character completely when placed in a differently shaped case.

The first perpetual calendar that used the celebrated caliber 240 Q and the same dial configuration as the REF. 3940 in a modern shaped case was the 1992 cushion-cased REF. 5040. Its companion, the REF. 5020 perpetual calendar chronograph, was a rather more aggressive television-screen shape, that

to melt imperceptibly into the tapering lugs. It was smooth to the touch like a pebble buffed by millennia in the ocean.

The classic caliber 240 Q could be appreciated through the model's sapphire crystal caseback, but it was from the face that the watch radiated character. The lambent cream dial was framed by a *chemin de fer* minute track that faithfully followed the interior contours of the bezel, while the light danced across the applied gold Breguet numerals and etiolated *feuille* hands.

This timepiece was a beauty. Back then, when it was released, I remember somebody saying that if God designed watches, they would look like the REF. 5940. That was probably going a little too far, but the watch is a classic Patek Philippe in every respect. ♦

FLY ME TO THE
MOON, LET ME PLAY
AMONG THE STARS



A large, ornate brass telescope is the central focus of the image. It is positioned diagonally, pointing towards the upper right. The telescope has a long, polished brass barrel with several rings and joints. The base of the telescope is more complex, with various adjustment knobs and a mounting bracket. The background is a deep blue night sky filled with numerous stars of varying brightness. Some stars are sharp points of light, while others are slightly blurred. The overall lighting is soft, highlighting the metallic texture of the telescope.

STORY David Rooney
PHOTOGRAPHS Leon Chew

If you've ever wanted to see what spring is like on Jupiter and Mars, you could try looking through a handmade, custom-built telescope created by Mark Thurstan-Turner and Paul Cruickshank-Inns. These two artisans make objects of majestic engineering and beautiful design that allow us to discover the awe-inspiring sights of our solar system



The first time he saw Saturn, the gigantic sixth planet from the sun, through one of his own hand-built telescopes, it was “a magical moment, seeing for the first time what you’ve only ever seen in a picture,” Mark Thurstan-Turner recalls. It was on a cool spring night in 2012, at about two o’clock in the morning, during an observing session in his west London garden. “It was like a Christmas-tree bauble hanging in the sky,” he explains. “I could see the planet and all the rings going around the planet, and it was mine. I owned it. Nobody else was looking at that the way I was at that precise moment in time. It was surreal.” From then on, his fate was sealed.

Thurstan-Turner came to hand building bespoke telescopes late in a varied career. He studied fine art and photography, and his creative and technical skills saw him employed as an interior designer, statue maker, muralist, wedding photographer, and designer of award-winning gardens at the world’s largest flower festival, Hampton Court Palace Garden Show, in the UK, and London’s prestigious Chelsea Flower Show. Then an accident in 2011 forced him to re-evaluate his future. The way forward came out of the blue. “I was lying in the bath,” he recalls, “and asked myself what I should do. And a voice said, ‘Make telescopes.’ So I thought, I’ll do that!”

Three years later, having retrained and created numerous telescopes by himself, Thurstan-Turner began collaborating with Paul Cruickshank-Inns, who constructs the precision wooden tripod bases, known as

deltapods, for many of Thurstan-Turner’s telescopes. Formerly a joiner at the Royal Aircraft Establishment in Farnborough, UK, Cruickshank-Inns spent the first part of his career developing high-tolerance experimental wind-tunnel models and supporting engineers working on Tornado and Jaguar military jets, as well as refurbishing vintage wooden aircraft. After leaving Farnborough, Cruickshank-Inns moved into the teaching of fine woodcraft, including guitar making, as well as vocational craft and engineering skills as a form of therapy.

Like Thurstan-Turner, Cruickshank-Inns had long understood the magical draw of telescopic observation. As a teenager, each month he had taken a Japanese-made pull-out telescope to the fields near his Thames Valley home in southeastern England to view the night sky. “It gave me a certain amount of healing to look up at the stars and the moon,” he explains. Constructing his own telescopes, which he began in about 2010, was a logical next step. It seemed inevitable that his and Thurstan-Turner’s orbits would eventually align; once they had, in 2014, the two artisans quickly developed what is described by Cruickshank-Inns as “a very collaborative, complementary relationship.”

The results of this collaboration, some five or six handmade telescopes per year, are not only optically superb – the pair obtain lenses to each client’s specification from the finest makers across the USA, China, Japan, and Taiwan – but also aesthetic works of art in their own right. As well as selecting their lenses, clients choose the external finish of the telescopes. While some select a sober powder-coated body, many opt for polished plating. For gold plating, this cannot be applied directly to the aluminum tube. First a nickel coating is laid down, then copper, before the gold is applied and then polished at a machine mounted on a 1950s rostrum camera support, a hangover from Thurstan-Turner’s photographic past.

Instrument-making history informs the pair’s approach to engineering, design, and finish. “The Victorians didn’t make ugly light-buckets that were just practical,” argues Thurstan-Turner. “They made telescopes that were aesthetically pleasing.” Both makers feel a connection with their predecessors. “It’s not form over function,” says Thurstan-Turner. “It’s function and form in balance.” But they take cues from modern technology, too. “NASA used gold a lot up in space,” observes Thurstan-Turner, “because of its highly reflective qualities.” External surfaces that are polished reflect heat better, allowing the telescopes to reach thermal equilibrium faster when used for solar observation. “All the pieces that make our telescopes work are external,” explains Cruickshank-Inns. “It’s exoskeletal. Nothing’s hidden.” It is perhaps

The telescope seen on pages 14–15 and opposite took Mark Thurstan-Turner and Paul Cruickshank-Inns (above, left and right respectively) around six months to build by hand. The 80 mm F15 achromatic

planetary scope (the longer tube) and the 102 mm apochromatic F7 FPL53 main scope, as well as the thinner finder scopes, are made of hand-rolled aluminum with 23.4k gold plating for a luminous shine



Right: a close-up view of a gold-plated custom eyepiece, which has a 2 in diagonal and a 2 in focuser. Far right: this sculptural appendage is a polished-aluminum counterbalance weight, which keeps the telescope steady when it is angled. Below: the smaller lensless finder or guide scope with an achromatic planetary scope that is 80 mm in diameter, and the main 102 mm telescope with a 50 mm helical focusing finder scope. Opposite: the telescope base and crow's-nest mount is a customized setup, which is finished in polished gold



telling that both artisans use new and vintage tools – some temperamental, others of the finest tolerance – to make their ingenious constructions. Precision and creativity go hand in hand throughout their work.

Nobody really knows who first made a telescope or when, but in 1608, the Dutch spectacle-maker Hans Lippershey applied for a patent for such a device. It proved an instant hit as a war-winning spy technology as well as for a loftier purpose: unraveling the secrets of the heavens. In 1610, the Italian astronomer Galileo Galilei achieved fame across Europe with the first published observations of the moon seen through a telescope, describing it as “a most beautiful and delightful sight to behold.” His book, *Starry Messenger*, described the night sky in exquisite detail, leading the mathematician Giovanni Faber to exclaim,

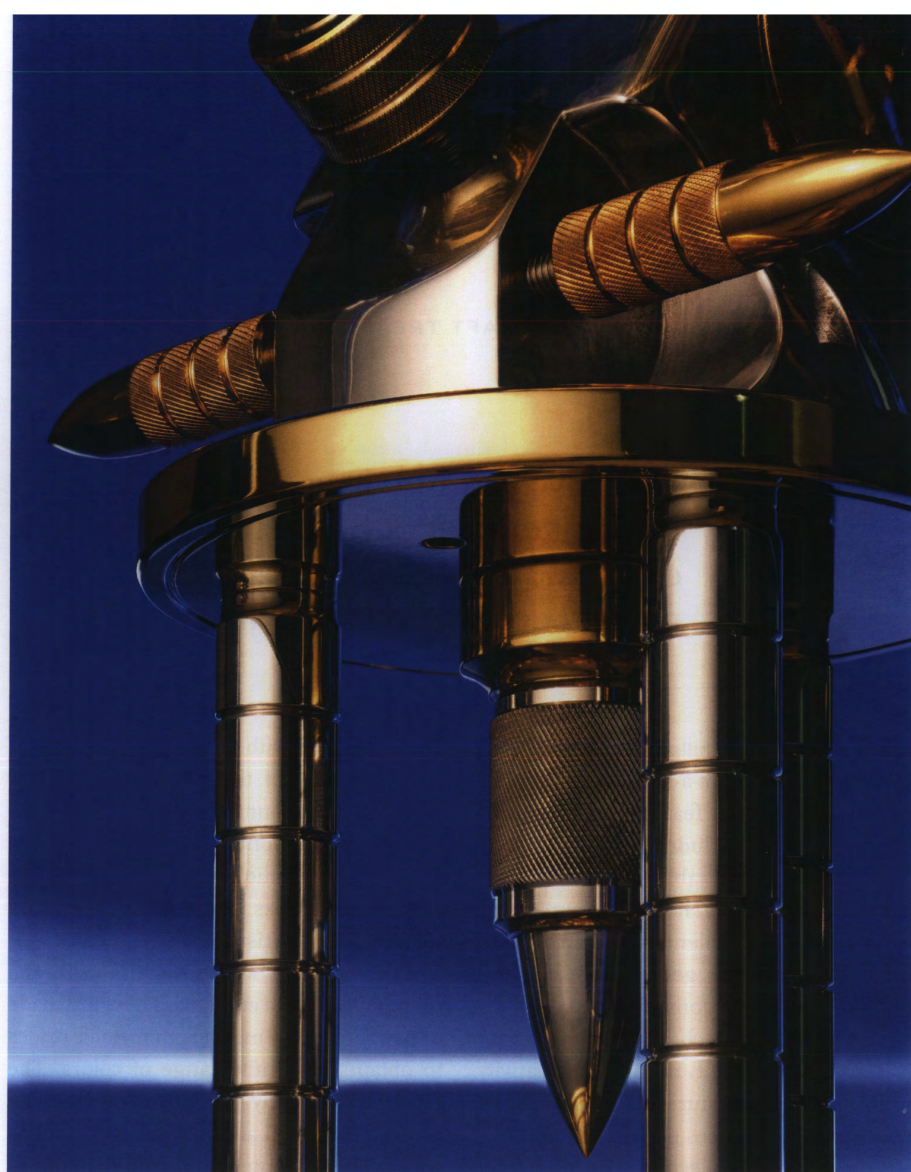
“You, Galileo, alone gave to the human race the sequence of stars,

New constellations in heaven.

O bold deed, to have penetrated the adamantine ramparts of heaven with such frail aid of crystal.”

Since their invention in the spectacular heat of the scientific revolution, telescopes have attracted a widely varied ownership. For some, they have been practical tools to see farther across land and sea or to map the skies, while for others they have been public statements of discernment, status symbols of an exquisite kind. They have brought people together and provided solitary moments of escape for others. For more than four hundred years, telescopes have revealed as much of their owners’ tastes and values as they have revealed to us the far-flung reaches of our world and universe.

Thurstan-Turner and Cruickshank-Inns go to great lengths to engage their clients in the bespoke construction process. They share videos and photographs of the work being carried out at each stage, so that, over time, the customer builds a connection with the telescope, long before the completed piece is finally shipped. The music being played in the workshops often reflects the musical taste of the client. “That way, they are part of it,” Thurstan-Turner explains. “It



Telescope-making “is not form over function” for Mark Thurstan-Turner. “It’s function and form in balance”

is theirs and nobody else’s. So, by the time they do get it, they’ve been involved from start to finish. People often say, when they unpack it, that they can smell the workshop.”

Some of these telescopes end up in city-center apartments, while others go to remote spots in Australia, China, and the USA. Some clients find the whole experience so affecting that they order again; one couple who lives in New Mexico now owns three telescopes made by Thurstan-Turner and Cruickshank-Inns. “It’s emotional for people,” Cruickshank-Inns comments, and he should know. When he or Thurstan-Turner wants to take a break, they pick up one of their telescopes and take a holiday in

space. “It’s being off the planet, away from the stresses and strains,” says Cruickshank-Inns. “It’s pure escapism. I’m no big traveler. For me, big travel is hopping up to the moon. That’s my pleasure cruise.” Thurstan-Turner describes it as “losing yourself in moments of awe and wonder.”

For these two creative artisans, making telescopes does not qualify as work. “It’s a passion, a calling. It’s in the blood,” claims Cruickshank-Inns. “It’s ingrained to want to create. It’s as essential as air and water and food and light.” These telescope-makers understand the power of their absorbing creations and the “beautiful and delightful sights” that can be found by using them. ♦



RARE HANDCRAFT TREASURES

Inventiveness and virtuosity are the backbone of our rare handcrafts, with cloisonné enameling flourishing in the new collection, explains Thierry Stern

Every year, Patek Philippe presents a new collection of one-of-a-kind and limited-edition models that features precious rare handcrafts and includes pocket watches, wristwatches, small table clocks, and dome clocks. These models showcase a remarkable variety of artisanal talents and help to foster important skills for generations to come. For me, the collections are not simply a demonstration of technical prowess; each is also a display of masterful creativity, presenting new features and drawing on ever-widening sources of inspiration.

In this year's collection, five pieces are particularly representative of this close alliance between aesthetic inventiveness and virtuosic craftsmanship: the Calatrava "Chameleon" and "Tropical Forest" watches. The dials of these models are augmented with *grand feu* cloisonné enamel. It is impossible, surely, not to be fascinated when contemplating the dexterity, experience, and supreme artistry required to produce one of these tiny pictures that measure 31.5 mm in diameter and display extraordinary richness of detail and glowing color.

The art of cloisonné enameling is an ancient technique that was used notably in antiquity and the Middle Ages to decorate jewelry and religious artifacts. It was also used on the first portable timepieces, made in the sixteenth century, as evidenced by several outstanding pieces on show at the Patek Philippe Museum in Geneva. During the twentieth century, our manufacture contributed to protecting this refined art form by giving it pride of place on selected timepieces such as the renowned World

Time watches with multicolored maps of different parts of the globe at the center of their dials. In our annual Rare Handcrafts collections, cloisonné enameling features among the techniques used to adorn the dome table clocks and the Calatrava and Golden Ellipse wristwatches.

The work on a piece starts with the preparation of the enamels. These are made of powdered glass mixed with metallic oxides to obtain an infinite range of colors. The enamels are finely ground using an agate pestle and mortar, and washed with distilled water. Then, using a full-scale drawing of

also, at what precise moment, neither too soon nor too late, to remove the piece from the kiln each time. The slightest error can ruin weeks' or even months' worth of work.

The dial designs of the two Calatrava "Chameleon" wristwatches raise *grand feu* cloisonné enameling to new technical and aesthetic heights. The enameler uses from 18 to 26 inches of 24k yellow gold wire in two different gauges (0.1 mm x 0.35 mm and 0.05 mm x 0.35 mm) to outline the animal on its branch. Fashioning the chameleon's crest from a bent gold wire calls for pliers adapted for that purpose. To realistically

In this collection there is a close alliance between aesthetic inventiveness and virtuosic craftsmanship

the piece as a template, the artisan cuts flat, extremely fine, gold wire into tiny sections and shapes them by hand with pliers to form the cells that compose the decoration. These gold partitions are then fixed to the base plate using vegetable glue that will disappear with the first firing.

Now begins the introduction of color. A brush is used to apply the enamel mixture (powder mixed with water) – a process interspersed with numerous firings at temperatures ranging from 1,380°F to 1,650°F. The enameler must be a past master of this "art of fire" to know which enamel powder will produce which color once fired but

convey the texture of the chameleon's skin and make it stand out as if in three dimensions against the jungle background, the enameler works with subtle combinations of opaque, semi-opaque, and translucent enamels in 24 to 27 shades of green, blue, and yellow that are applied in layers. And so emerges a tiny, vibrant picture that will differ slightly from one watch to another.

On the dials of the three "Tropical Forest" Calatrava wristwatches, cloisonné enamel is united with another rare handcraft that is lovingly preserved by our manufacture: hand-executed guilloché work. First, the gold dial plate is adorned with motifs, produced



REF. 5089G-109

This "Tropical Forest" Calatrava wristwatch in a 38.6 mm white gold case features an enchanting jungle-themed *grand feu* cloisonné enamel design. Hand-guilloché motifs trace the veins of leaves, and a subtle hand-engraved shadow signals the lively presence of a gecko, sitting on the other side of a leaf. There are six watches in this limited edition

REF. 5177G-026

On its cloisonné enamel dial, this "Chameleon" Calatrava in white gold (case diameter 38 mm and available in a limited edition of six) pays tribute to the jungle's master of camouflage. The tiny three-dimensional portrait required 23 in. of 24k yellow gold wire and opaque, semi-opaque, and translucent enamels in 27 colors, applied in layers

REF. 5177G-027

The dial of this white gold "Chameleon" Calatrava in a limited edition of six watches reveals, in cloisonné enamel, the beauty of the animal hiding in the tropical vegetation. To reproduce the creature's crest, the enameler worked a fine 24k yellow gold wire into shape by hand. The bezel of the 38 mm watch is decorated with a guilloché hobnail pattern

PATEK PHILIPPE

GENEVE



REF. 5089G-103

The king of the savanna graces this "Lion" Calatrava, in cloisonné enamel with silver leaf and miniature painting on enamel. Each model in this limited series of six 38.6 mm white gold watches has a sapphire crystal caseback beneath a hinged 18k white gold cover



REF. 5089G-104

One of a limited edition of six, this 38.6 mm white gold "Rhinceros" Calatrava depicts the animals and Mount Kilimanjaro in cloisonné enamel and miniature painting on enamel. The design uses 26 in of 24k yellow gold wire and 44 enamel colors



REF. 5089G-105

This 38.6 mm white gold "Buffalo" Calatrava, available in a limited edition of six, features cloisonné enamel and miniature painting on enamel that uses 38 colors. Silver leaf lies beneath translucent layers of enamel in the areas that depict grass



REF. 5077/100G-047

This 38 mm-diameter white gold "White Namibian Elephants" Calatrava with a dial in cloisonné enamel, enriched with silver leaf and miniature painting on enamel, captures a mother's tenderness for her baby. It is one of a limited edition of six diamond-set watches



REF. 5077/100G-049

The mixed techniques of cloisonné enamel over hand-executed guilloché work produce a splendid play of transparency, depth, and relief on the dial of this "Tropical Forest" Calatrava in a limited edition of six. The 38 mm white gold case is set with diamonds



REF. 5077/100R-052

By uniting cloisonné enamel with embedded silver leaf and miniature painting on enamel, the enameler has recreated, with great finesse, a scene from the African savanna on the dial of this 38 mm rose gold "Leopard" Calatrava. It is available in a limited edition of six



REF. 5077/100R-059

The gold dial plate of this 38 mm rose gold "Tropical Forest" Calatrava was hand-guilloché to resemble the veins of leaves and then coated with layers of mainly translucent cloisonné enamel that took 20 to 30 firings. It is issued as a limited edition of six pieces



REF. 5738/50G-019

A natural-history illustration by the French artist Nicolas Huet the Younger inspired this 34.5 mm x 39.5 mm "Monkey" Golden Ellipse, a six-piece limited edition. The cloisonné enamel and miniature painting on enamel portray an American marmoset



REF. 5738/50G-018

It takes an enameler of rare artistry and skill to breathe life into the marmoset on the dial of this 34.5 mm x 39.5 mm white gold Golden Ellipse in cloisonné enamel. Enriched with miniature painting on enamel, this model is part of a limited edition of six watches



REF. 5738/50G-013

The dial decoration of this 34.5 mm x 39.5 mm white gold "Monkey" Golden Ellipse, a limited edition of six, unites cloisonné enamel and miniature painting on enamel. It depicts an African Diana monkey on a tree branch, framed by the distinctive watch shape



REF. 5738/50G-014

An agile and artful American squirrel monkey adorns this white gold 34.5 mm x 39.5 mm "Monkey" Golden Ellipse, a limited edition of six. The scene showcases the technique of cloisonné enameling, here in 25 colors, and miniature painting on enamel



REF. 5738/50G-023

A foal frolicking before its elders forms a geometric composition on the dial of this white gold 34.5 mm x 39.5 mm "Zebras" Golden Ellipse. This limited edition of six pieces is decorated in *grand feu* cloisonné enamel, which required 15 firings and 39.4 in of gold wire

These precious objects, made more magnificent by the artisans' hands, constitute the finest tribute that one could pay to the wonders of our planet, Earth



REF. 995/118J-001

The striking portrait on the back of this 44.1 mm yellow gold "Oryx" pocket watch was created in wood-micromarquetry with 200 tiny inlays. The unique piece is accompanied by an acacia-tree-shaped stand, handmade from yellow gold and petrified palm wood



REF. 995/129J-001

To produce the design on the back of "Greater Kudu," a unique 44.1 mm yellow gold pocket watch, the wood-micromarquetry-maker assembled 372 pieces and 60 tiny inlays in a palette of 31 species of wood of different colors, textures, and veining



REF. 995/117G-001

The visual play of stripes on the back of "Zebra," a unique pocket watch in white gold with a 44.1 mm case, was created using a *grand feu* cloisonné enamel design requiring more than 78 in of 24k gold wire. The cloisonné enamel dial takes up the same motif



REF. 995/128J-001

It took the marquetry-maker an extraordinary 610 tiny veneer parts and 50 inlays, together spanning 16 species of wood, to make the sprinting feline emerge with such power on the back of this unique 44.1 mm yellow gold pocket watch entitled "Cheetah"

with the aid of an ancient rose engine. The difficulty in this process lies in carving all the fine grooves evenly on such a small area. Over this decoration, which represents the veins of the leaves, the enameler lays down some 30 inches of gold wire. The cells created by these gold partitions are then filled with mainly translucent enamel, so that the guilloché relief shines through. A highly refined detail on the REF. 5089G-109 – a hand-engraved shadow – suggests a gecko is sitting on the other side of a leaf.

These five Calatrava wristwatches are not the only items in the 2022 collection with decoration inspired by tropical forests. We find this theme flourishing on "Jungle," a small cloisonné enamel dome clock, and on the Golden Ellipse "Monkey" wristwatches, where cloisonné enamel dials are enriched

with miniature painting on enamel. Wildlife in other climes also features prominently among the 59 timepieces, on the backs of pocket watches in wood marquetry or cloisonné enamel as well as on the dials of the Calatrava and Golden Ellipse wristwatches in cloisonné enamel, where stunningly life-like depictions include kudu, oryx, lions, cheetahs, leopards, zebras, rhinoceroses, buffalo, and Namibian white elephants.

For me, all these precious objects, made more magnificent by the artisans' hands, constitute the finest tribute that one could pay to the wonders of our planet, Earth. They are a reminder to us all that the treasures of nature deserve to be carefully preserved and handed down to future generations, just like our rare handcraft timepieces. ♦

Translated by Barbara Caffin



REF. 10013M-001

The decoration on this unique "Jungle" small-sized dome table clock in cloisonné enamel conjures up all the enchantment of a tropical forest at the ocean's

edge by way of 388 in (or 32.3 ft) of 24k yellow gold wire and a palette of 36 mainly translucent enamel colors, lending themselves to subtle chromatic effects



STORY Francesca Oddo

PHOTOGRAPHS Giulio Ghirardi

THE MISCHIEVOUS COUNT AND HIS GARDEN GROTTO

The Villa Visconti Borromeo Litta in Lainate was the creation of Count Pirro I Visconti Borromeo. He wanted it to become a “place of enchantment” but he was not speaking only aesthetically; he had in mind far more prankish ways to delight his visitors

“Take great care not to walk alone in the gardens of Lainate,” warned Stendhal in 1817 in his travel journal, *Rome, Naples, and Florence*. He was staying at the villa belonging to the Visconti Borromeo Litta family, near Milan in northern Italy. “The garden is full of concealed spouts designed to soak visitors. As soon as I stepped onto the lowest step of a certain staircase, no fewer than six jets of water sprayed up between my legs.”

It’s a prank that might still catch visitors unawares today. As you walk through the nymphaeum, water can spurt from an array of jets set in unexpected places, which are triggered, at just the right moment, from small rooms hidden among the grottoes. Count Pirro I Visconti Borromeo would have been delighted. This fun-loving aristocrat, who was also an enlightened intellectual and an extroverted member of Milan’s political

circles, was responsible for installing these mechanisms in the latter quarter of the sixteenth century. In doing so, he fulfilled a dream to create a place where he could welcome and amaze illustrious guests, confirming his standing in the eyes of his peers while also revealing his innovative, playful, and nonconformist side.

The count occasionally amused himself by turning on the water jets by hand through narrow slits in the walls of specially made hiding places. Usually, the fountain attendants, or *fontanieri*, would monitor the routes taken by the unsuspecting guests as they wandered through the park and then surprise them with sprays of water shooting up from the ground or out of statues, vases, and automata. At other times, it was the unfortunate visitors themselves who set off the water jets, perhaps by perching on a seat. Meanwhile, the crafty count watched with delight, the joke having worked so well.

These ingenious devices turned this attractive country abode, built on a family estate, into a fashionable villa of delights that was surrounded by nature, far from the hustle and bustle of city life. As a patron and collector, the count wanted his home to surpass all other noble residences, such as the Medici villas in Tuscany that had first inspired him. The estate soon became the

In the nymphaeum's central octagonal Atrium of the Four Winds, the travertine-covered niches in the lower part of the walls once contained bronze statues of the room's eponymous winds. Above these spaces are stucco statues personifying the Four Seasons by the sculptor Francesco Brambilla (1530–1599). They have crowns of flowers, wheat, fruits, and laurel. Two of them flank Mercury (shown in the center), while Venus is above another doorway

backdrop for feasting and entertainment, a place for study, a laboratory for new ideas, and a refuge for royalty, literary scholars, artists, and poets.

Choosing from the best of Milan's creative talent, Count Pirro I entrusted the building works to the architect Martino Bassi, one of the most brilliant minds of the period, who had also worked on the cathedral of Milan. Bassi put a team of gifted and experienced stonemasons, sculptors, and painters to work. Nowadays, on entering the formal courtyard, visitors are met by two buildings from different eras: the sixteenth-century villa and an eighteenth-century extension that was built by the Visconti Borromeo Arese and Litta families. The first structure houses the Hall of Aeneas, decorated with scenes of Aeneas's flight from Troy and of his legendary journey to Rome as well as pieces that were originally in the nymphaeum and have been saved from the ravages of time. Among the later building's best-preserved rooms is the ballroom, with its frescoes by the neoclassical artist Giuseppe Levati and ornately stuccoed musicians' balconies supported by magnificent telamones.

Beyond the villa to the north stands the undisputed masterpiece of the extensive park, the nymphaeum. Like a treasure chest waiting to be opened and examined, it is full of symbolic references and allegorical meaning. It was designed by Count Pirro I in homage to his bride, Camilla Marino, an art enthusiast. Yet this love token is a place where enchantment is combined with the more prosaic appeal of practical jokes.

Bursting with travertine embellishments, the layers of architectural, sculptural, and pictorial styles in the nymphaeum reflect tastes stretching back over three centuries. Its artificial grottoes are decorated with shells and stony coral known as madrepora (evidence of the count's passion for the marine environment), as well as automata, statues, mosaics, and wall paintings of gods, animals, and monsters. Water, the emblem of life, is the theme, but in the count's rather mischievous hands, it also becomes a playful instrument.

Water pervades the dozen rooms that were once used to house the count's collections and that run almost symmetrically to the right and left of the Atrium



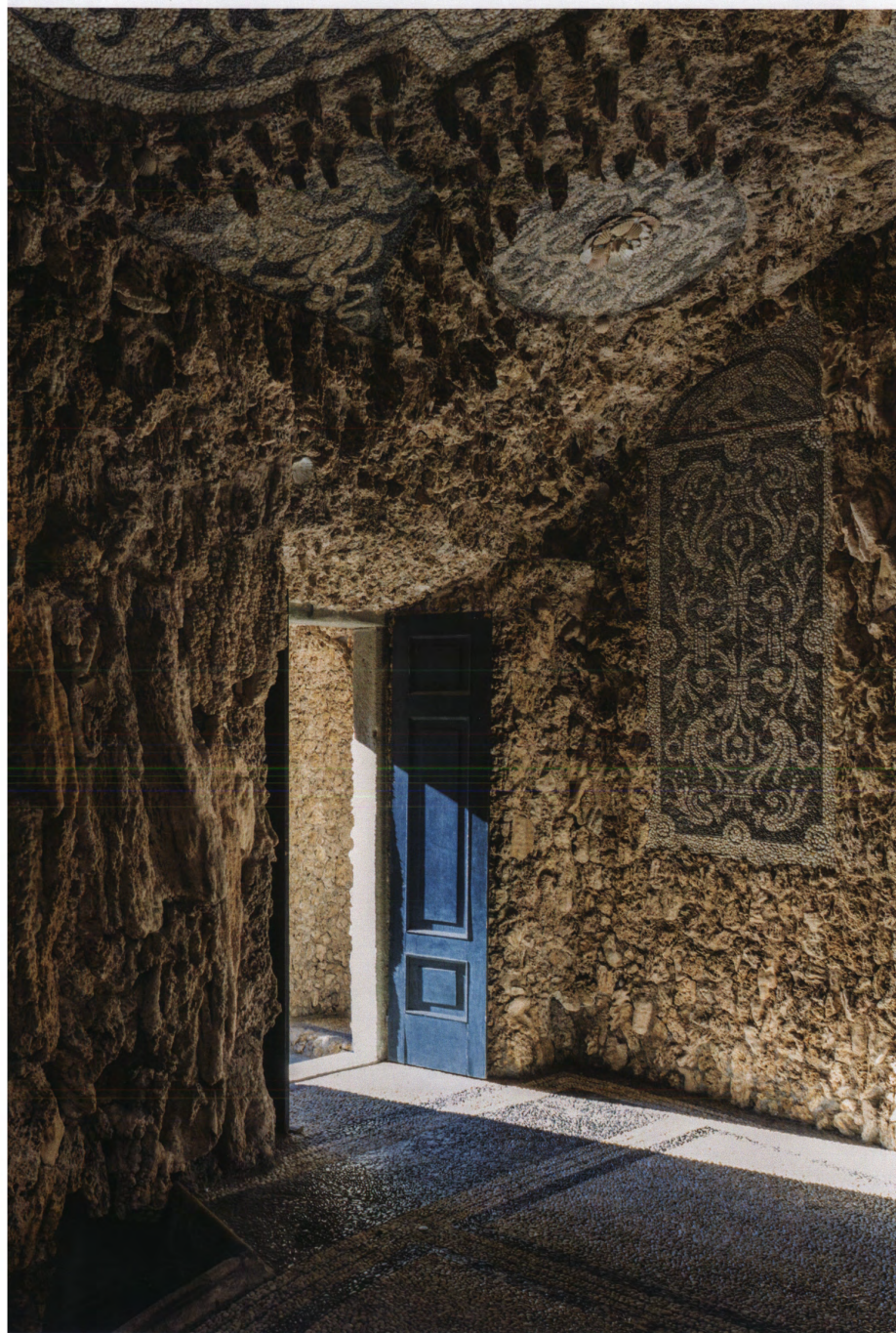
Above: the north facade of the neoclassical sandstone nymphaeum, with the white water tower seen in the distance. The tower contains a copper tank that can hold 1,980 US gallons of water, and this supplies all of the water features. Right: the Windmill Court is named after the fountain in the center, which includes a putto holding up an iron

windmill that can shoot out jets of water. Fountains can also appear from among the pebbles on the floor. Seen behind the Windmill Court is the Atrium of the Seat, with statues of Dawn and Twilight, the figures reclining as they do on Michelangelo's tomb for the Medici family in the church of San Lorenzo in Florence. Across the atrium from the

statues, you might be tempted to take a seat but you would not stay dry if you did. Opposite: on the south side of the nymphaeum, the facade has travertine encrustation between the architectural features and stucco statue niches. Sprays of cooling water can issue from jets hidden in the paving and from the top of the ornamental stone vases







Above and top right: the semicircular walkway of the Old Caves, on the eastern end of the nymphaeum, is barrel-vaulted with travertine formations and stalactites surrounding mosaic panels and statues in the niches. Some of the mosaic designs are abstract, and others are pictures of flora and fauna. They are made up of black

and white pebbles, some of which were painted, after being set in place, in tempera shades of brown and turquoise to add detail. Arrangements of seashells are included elsewhere as decorative focal points. Right: stony coral forms and stalactites are encrusted around the setting for the hen automaton in the Egg

Room; also found here are colored semiprecious stones and animal figures. Delicate restoration work has brought back the original trickery to this room; water springs from the small basin in the niche above the hen, down into the larger rose marble basin, where it activates a central jet that levitates the egg





Left: as well as in panels in the Old Caves part of the nymphaeum, mosaics cover the walls of all the other rooms, varying in design throughout. They are made up of black limestone and white quartz pebbles set in abstract patterns and give every room a beautifully

bold appearance. Since it was first built, the rooms of the nymphaeum have been used to exhibit the family's collection of sculptures, busts, paintings, and curiosities, as well as to surprise strolling visitors with the ingenious and unpredictable hidden water features. Below: the old

hydraulics pipework has been carefully restored, bringing many of the fountains and water special effects back to life. It is an ongoing project to recreate and maintain all of Count Pirro I's water games



of the Four Winds. This octagonal space is surrounded by a series of basins that once held bronze statues personifying the winds, which blew air and sprayed jets of water. Above those spaces, you can still see niches with the stucco statues of Venus and Mercury flanked by those representing allegories of the four seasons. In the dome above, the painted columns are deceptively out of line, prompting visitors to move into the center where the pillars appear straight. Here, treading on a sprung mechanism activates water jets that spray the unsuspecting guests. With a little imagination, you can almost hear the rustle of the count's cloak as he walks through the hall, grinning with glee.

Everywhere, the figure of Count Pirro I is present, inviting us to enter his magic caves. Leading into the rooms, the black-and-white pebble mosaics covering the floors and walls create an air of enchantment. Like a precious web of two-colored motifs, the effect is very attractive and surprisingly modern for the aesthetic taste of the time. One room contains another surprise: under a fine spray of water from the ceiling of the Egg Room, visitors encounter a hen-like automaton. The count had come across *Wunderkammern*, literally "rooms

This marvelous place combines hydraulics and art, engineering and architecture, science and alchemy, reality and mystery

of wonder," that were used to display collections of curiosities at many European courts. These often included automata, which had become fashionable in Europe in the sixteenth century although their origins date back to ancient Greece. Count Pirro I was among the first enthusiasts, fitting one in his nymphaeum almost two centuries ahead of a similar automaton, the so-called "Digesting Duck" of 1739 by Jacques de Vaucanson.

Once the hidden fountain attendant had activated the automaton, water started to spurt from the crest and the hen laid an egg – a symbol of life – which was then lifted by another spout of water. Symbolism adorns the walls: the figure of a butterfly, representing metamorphosis, together with shells that symbolize

femininity, and serpents that allude to virility. Here, in the Egg Room, the enterprising count spent time on his alchemical experiments, inspired by an awareness of empirical principles, scientific curiosity, and magic applied to science, a characteristic of courts in the late sixteenth century.

At one end of the nymphaeum, the Old Caves evoke a sense of suspense through the faint splash of diaphanous spray falling in front of Venus, the goddess who was born from the sea, and two naiads (protective freshwater spirits). In contrast, mischievous and sacrilegious jets of water provide moments of complete hilarity by suddenly spurting up from the floor.

The southern facade of the nymphaeum has its own water features, with a sequence of fountains along the straight stone balustrade. Here, the geometric patterns and arabesques of the floor mosaics seem to echo the poetry that Count Pirro I liked to read outside (he was a member of the Accademia dei Facchini della Val di Blenio, an association of artists, craftsmen, musicians, and actors). But take care, because while you are admiring these beautiful surroundings, you may get sprayed with water, thanks to the jets hidden in the niches.

When designing the nymphaeum's hydraulic system, the count turned to the engineer Agostino Ramelli, who in turn was inspired by Leonardo da Vinci's research on mechanical engineering and hydraulics during his time at the court of Ludovico Sforza (or, il Moro). The Water Tower contains a well where an Archimedean screw was driven by a horse, harnessed to a spoke, that walked around in circles to pump water into the large reservoir (this is now automated). Thanks to a drop of 66 feet and a dense network of pipes buried in the walls and under the floor, the water flowed to the jets through valves operated by the fountain attendants, as is still done today. It was an ingenious system, especially when you think that houses of the time lacked any running water.

The estate fell into disrepair in the late nineteenth and early twentieth centuries. Fortunately, it was purchased by the municipality of Lainate in 1971, and, nine years later, a major restoration program was started. The water features have been revived thanks to the Friends of Villa Litta, founded in the early 1990s to raise awareness of the architectural complex. It is through their efforts that the memory of the count who enjoyed a practical joke continues to live in this marvelous place. Its magic combines hydraulics and art, engineering and architecture, science and alchemy, reality and mystery. Pirro I Visconti Borromeo has been proved right: the most brilliant ideas often emerge from contradictions. ♦

Translated by Lucinda Byatt



This page and opposite: on floors, walls, and ceilings, the black limestone and white quartz mosaics, in symmetrical designs of geometric and floral motifs, today look far more modern than their age. The creator of the majority of the mosaics was Camillo Procaccini (1561–1629), an artist who came from Bologna. The black-and-white features are complemented by gray-veined limestone doorway jambs as well as wooden doors and window shutters that have been painted a deep green



A young vintage

As in a fine wine, the balance between aging and freshness can create a delightful harmony. Nicholas Foulkes here admires two new Patek Philippe watches that bring classic style to contemporary timepieces to be prized by the younger and older generations

"I confess myself to be a great admirer of tradition. The longer you can look back, the farther you can look forward." These words of Sir Winston Churchill's may have been spoken in the early 1940s, but they continue to resonate today, and they came to mind while studying one of the most attractive of this year's launches at Patek Philippe: the salmon-dialed, white gold-cased REF. 5172G manually wound chronograph. Although this new model has never been seen before, it seems uncannily familiar, and therein lies its genius.

As the offset position of the two sub-dials (slightly below the nine o'clock to three o'clock axis) suggests, this timepiece's caliber is the CH 29-535 PS. Introduced in 2009 and now an icon in its field, the hand-wound chronograph movement made its debut in the Ladies First Chronograph REF. 7071 before cementing its reputation in the REF. 5170. However, the stepped case, syringe hands, and box-form sapphire crystal glass of this new model show that it has been drinking deeply from the same gene pool as the Perpetual Calendar REF. 5320, which appeared to considerable acclaim in 2017.

That launch five years ago is particularly memorable for Thierry Stern in that it was the first time that his father asked to wear a piece that had just launched. For





as long as Thierry could remember, his father had told him to wait for two years before wearing a new watch. "He was always the one teaching me the rules, telling me never to wear a new model." But such was the beauty of the classically styled yet contemporary perpetual calendar in question that Philippe Stern broke his own rules.

It is easy to see why. The watch is gorgeous, so gorgeous that it seemed a pity to leave it on its own. "I said to myself, 'We have found such a lovely case; I think we can really create a family with it.' And that's why I wanted to try with a chronograph. We made some drawings, and immediately I could see that this piece was a good match. I was pretty sure that most of the people who would buy the REF. 5320 would also buy the REF. 5172, because together they are siblings. The idea was to have a little family with two complicated pieces that match each other very well."

The appeal of the REF. 5320 and the REF. 5172 resides in the capacity to reconcile past and present to create watches that are, if it is not too oxymoronic to say of a timepiece, intemporal.

"My idea with the REF. 5320 and now the REF. 5172 is to develop a style that is a good fit between different generations. I made the REF. 5320 because I was sure that my dad would wear it. Even my kids like it, and that's what is fun about it. But it's not easy to create a watch that can be worn by people of different ages. That's what I told my kids when I showed them the REF. 5172. I said, 'It looks like it is from the past, but it is made for the present.'"

"It's the thickness that interests me first," explains Thierry of the light slimness that is shared by the REF. 5320 and REF. 5172. "The biggest task I have is to train the younger generation in Research and Development and to tell them the challenge is not just to be able to put the watch into production. No, the challenge is to make the model so slim that nobody else can do it. And I accept that I'm going to lose a few cases, because it is a difficult way to make watches."

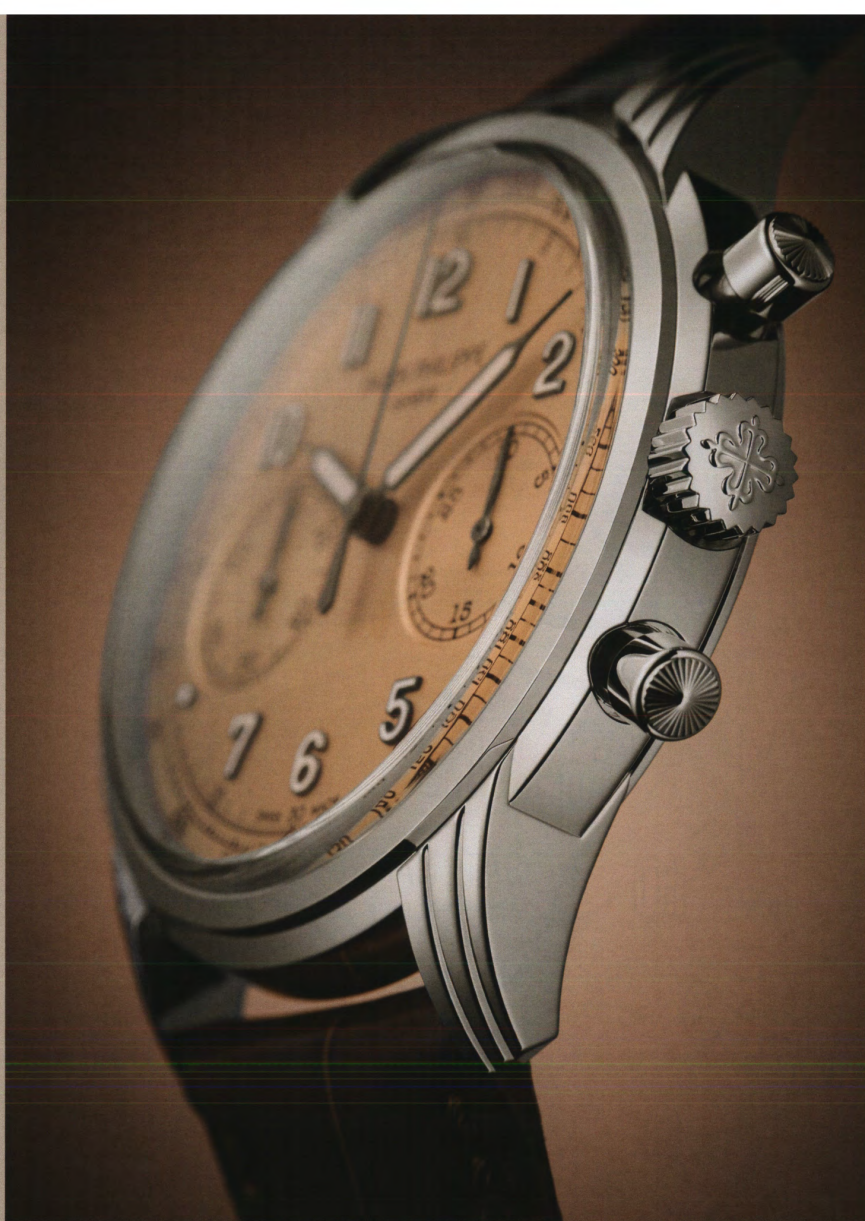
But as well as giving his production team a headache, Thierry also employs subtle visual legerdemain in his tireless pursuit of slenderness. Students of Patek Philippe history will recognize the triple-stepped profile



of the lugs from the REF. 2405 of the 1940s (see above). In addition to giving visual interest and being very tricky to polish to gleaming brilliance, the tiered profile of the lugs and case creates a sleek, slender visual effect. The slim look of the flanks is achieved in part by the classic-looking, box-form glass that is only possible thanks to modern methods. The parallel inner and outer sides of the glass mean there is no distortion of the dial, whatever the viewing angle. The technical capabilities of the 1940s did not permit manufacture of high-quality sapphire crystal, and instead inferior Plexiglas was used. Thus, it is upon such subtle paradoxes that the identity of this small family of vintage contemporary watches is founded. Thierry says, “I like to design something that appears simple at first glance, but which, when you look closer, reveals more and more in the way of details, because it’s technically challenging and time-consuming to produce.”

Because of the horological culture and knowledge required to appreciate the subtleties of these watches, Thierry does not believe them to be suitable for the neophyte. “This watch is made for somebody who understands where we are coming from. When I work on these types of caliber, I know that it is not for somebody who will be buying a Patek Philippe for the first time but usually someone who already owns a few. It is not like, for example, the Nautilus, where you have newcomers to the brand wearing it because it’s famous. This model is not about fame. It is appreciated by true collectors, by people who know Patek Philippe and who know about watchmaking and case-making.”

However, just because this watch is intended for a sophisticated customer, it does not necessarily follow that it is an overly serious piece. “It’s a very easy watch to wear. It should be worn every day, not only for an



The 1940s REF. 2405 (top left) inspired the use of triple-stepped lugs on two new models with vintage contemporary style and salmon-colored dials – the 41 mm Chronograph REF. 5172G (see previous

pages, left) and the 40 mm diameter Perpetual Calendar REF. 5320G (previous pages, right). Above: this side view of the REF. 5172G (top) not only showcases the three-tier lugs and two guilloché chronograph pushers but it

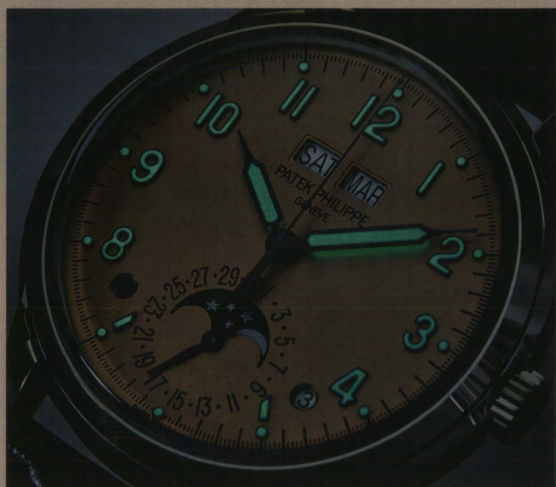
also reveals how the box-form sapphire crystal glass allows visibility of the rose-gilt opaline dial from any angle; the small seconds sub-dial is at nine o'clock and the tachymetric scale is on the periphery (bottom)



Rather than a watch for special occasions, this watch brings a sense of occasion to the everyday

evening, not only for an event.” Rather than a watch for special occasions, this watch brings a sense of occasion to the everyday. And Thierry predicts that the family is likely to grow. “I could imagine a nice Calatrava joining this family. I think it would be challenging to find the right dial for it, but if I had such a piece on my wrist, I would love it. I think it’s nice to have a simple movement, and it’s also a matter of price – not everybody can afford a REF. 5320 or 5172.” It is clearly Thierry’s hope that, with its balance of the classic and the contemporary, the novel and the nostalgic, the sophisticated appeal of this growing family will be brought within reach of the younger collector.

With the launch of the REF. 5172, Thierry Stern is saying that the vintage contemporary style is here to stay. And although his exploration of this aesthetic idiom is only in its early stages, it is likely that in years to come this will be seen as one of the defining design directions of the Thierry Stern era. ♦



Views of the Perpetual Calendar REF. 5320G showing the visibility of the dial through the box-form glass (top); the charcoal-gray, white gold applied numerals and syringe-shaped hands contrasting against the rose-gilt opaline dial (middle); and the white luminescent coating on the hands and numerals for legibility in darkened conditions (bottom)



STORY Jean-Pierre Criqui

The asking of questions is the bedrock of science, and in the eighteenth century a curious polymath, a man with many questions, was searching for the answer – a measurable and recordable answer – to a much-wondered question: how blue is the sky?

SHADES OF SKY BLUE

Not blue, the sky? How can that be? Placed prominently in the catalog of life's little disappointments is the moment in childhood when we learn that the sky is not blue, as we have always painted it. Yet, of course, we do all see that depending on the weather, the sky may also assume various shades of white or gray, and the coming of every night brings it back into the bottomless black of the universe. All of this is very confusing for the Doubting Thomases who believe only what they see, and it compels us to ponder the relativity of our observations. Because the observer is always observing while themselves being in a particular place, they effectively influence what they observe; in a word, they "color" it. Recognition and avoidance of this kind of anthropocentrism is crucial in the modern scientific understanding of the laws of physics and chemistry, which constitute the two pillars of biology.

Horace Bénédicte de Saussure (1740–1799), a Genevan scientist who was also a pioneer of mountaineering, took a close interest in the gradations of blue that float above our heads when the weather is fine. Born into a family that had come to Switzerland from Lorraine, France, in the sixteenth century, he was a keen botanist and would often go collecting plant specimens in the Chamonix valley and then explore Mont Blanc. Later in life, he would extend this summit-conquering to the extinct volcanoes of Auvergne, France, and to ascending Mount Etna on the east coast of Sicily. By the age of 22, Saussure was a professor of physics and philosophy at the Academy of Geneva, where he lectured on everything from logic and metaphysics to chemistry and astronomy. Our Enlightenment polymath would be followed by other illustrious figures in the worlds of science and thought. His son was the chemist and botanist Nicolas Théodore de Saussure (1767–1845), and – perhaps the most famous member of the lineage today – his great-grandson, Ferdinand de Saussure (1857–1913), wrote *Course in General Linguistics*, which was published posthumously in 1916 and is generally considered to be the foundation of modern linguistics. It is no great stretch to say that Ferdinand did for the science of language what Horace did for the perception of blue.

Having observed that the sun had something to do with the blue we perceive in the sky (it has since been established that the sky looks blue after the terrestrial atmosphere has absorbed certain wavelengths of the sun's radiation), Horace also noted that the color

variations in question depended on the observer's position and the angle of their viewpoint. Hence he invented a modest device, the cyanometer, the name of which literally conveys what it sets out to do, that is, measure the shade of celestial blue (the word cyan comes from the Greek *kuaneos*, meaning dark blue).

Originally a cardboard rectangle pierced with 16 openings, each accompanied by a block of blue in a shade of increasing intensity, the cyanometer was first used by Saussure in 1787, when he compared his experience up on the top of Mont Blanc with that of his son on Chamonix at the same moment and that of a friend who had stayed put in Geneva. On the summit, Saussure recorded his highest measurement yet: 39 degrees of blue. From these three simultaneous applications of the cyanometer, the uncontested conclusion was that the blue of the sky became darker

the higher one climbed. Our scientist-alpinist further refined his invention the following year by giving it a circular form (as seen opposite), which made it possible to distinguish 53 shades from white to black, that is, from 0 to 52, via a complex range of blues.

The publication of an article in the Turin journal *Mémoires de l'Académie Royale des Sciences* in 1788–1789, "Description d'un cyanomètre ou d'un appareil destiné à mesurer la transparence de l'air" (or "Description of a cyanometer or an apparatus designed to measure the transparency of the air") confirmed the arrival of this newcomer in the ever-expanding family of scientific tools.

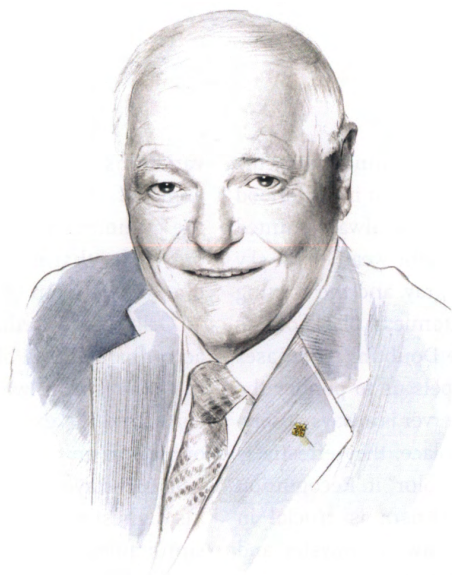
The instrument conceived by Saussure turned out to have a distinguished career. The German naturalist and geographer Alexander von Humboldt, with whom the cyanometer is often associated, took it on his expedition to the Americas from 1799 to 1804. There he used it, for example, to assess the shades of the sky from the summits of Ecuador. Atop the Chimborazo volcano, his measurement of 46 exceeded Saussure's on Mont Blanc by a full seven degrees of blue.

Even today, it is still possible to acquire a cyanometer in exchange for a modest sum and thus to indulge that passion for measurement – one of the defining features of any truly scientific procedure – that moved Saussure and impelled him to also develop the anemometer, the diaphanometer, the electrometer, the eudiometer, the heliothermometer, and the hygrometer. Tell me what you measure, and I shall tell you who you are. ♦

Translated by Charles Penwarden



The inquiring Horace Bénédicte de Saussure, shown above, painted by Jens Juel in 1778, was the first to make a cyanometer (opposite) and hold it up to the sky to measure its blueness. The chart has a number for each shade, giving a recordable value



STORY *David Rooney*

The Patek Philippe Museum in Geneva is such a rich treasure house of horological history that even the most ardent watch fan welcomes a guiding hand for their visit. Who better to curate a route through the museum's collection than the firm's honorary president, Philippe Stern? Using the Tour Assistant on handheld multimedia tablets, visitors can follow a path around Monsieur Stern's personal highlights, gaining an absorbing and revealing insight into his motivations and passions along the way. Selected stories and exhibits cover everything from Geneva's rise as a global watchmaking center to the city's remarkable tradition of miniature enamel painting. Throughout, Patek Philippe's own contributions to watchmaking history can be understood and studied among the extensive displays. This tour is a synopsis of Mr. Stern's lifetime of discerning collecting. During it, each visitor will see exciting new connections among some of the finest horological artifacts ever made.





1 *Madonna of the Rose*, pocket watch, c. 1640,
case Ø: 68 mm (Inv. No. S-476)



1. Jean I Toutin, pioneer of enamel painting
Our selection from Mr. Stern's tour begins with exquisite miniature painting on enamel. A watch made around 1640 is adorned with a scene of the *Madonna of the Rose*, after a painting by the French artist Simon Vouet (1590–1649), which visitors can see in the accompanying multimedia presentation. The many-layered technique of enamel painting is said to have been developed by the French goldsmith Jean I Toutin (1578–1644) early in the seventeenth century. At that time, the Loire Valley city of Blois became the epicenter for enameling, and as a favored royal residence it attracted specialist craftspeople.



2 *Tulips*, pocket watch, c. 1640,
case Ø: 58.6 mm (Inv. No. S-1082)

2. Semper Augustus

The precious tulip known as the Semper Augustus was one of the rarest in history. White with deep red flames, it fetched huge prices in seventeenth-century Holland during a period of wild financial speculation known as "tulip mania." The second stop on our tour brings visitors to a fine watch made around 1640 in Blois, France. It is decorated with luxurious enameled bouquets including Semper Augustus tulips in full bloom, some already wilting as was typical in still life paintings of the time. This watch was one of the finest of its day. Besides its exuberant enamel paintings, it is extensively set with rubies and diamonds.



3 *Roman Charity*, pocket watch, c. 1715,
case Ø: 57 mm (Inv. No. S-244)



4 Scent flask with singing bird and an organ, 1787,
H: 15.5 cm / W: 63 mm / D: 48 mm
(Inv. No. S-1006)

3. The Huauds put their stamp on Europe

The third highlight on this tour reinforces enamel painting as a personal passion of Mr. Stern's. Here, the visitor's attention is drawn to details on some late-seventeenth-century watches painted by the Genevan dynasty of enamellers, the Huauds, who were celebrated across Europe. The *Roman Charity* pocket watch, seen here, far left, was made around 1715 and is an especially fine example of the family's work.

4. Siren song of the Jaquet-Droz androids

The fourth selection from Mr. Stern's tour offers a parade of mechanical marvels made in the eighteenth-century Swiss workshop of Pierre Jaquet-Droz (1721–1790), his son Henri-Louis, and adopted son Jean-Frédéric

*Few people ever get
to see horology's
rarest and
most exquisite
masterworks*

Leschot. Jaquet-Droz specialized in automata, from large-scale humanoids to miniature singing birds. Some were small enough to fit into pocket watch cases or scent bottles, elaborately decorated and jeweled to appeal to the Chinese market. The bird inside the front of this scent flask opens and closes its beak and moves its tail while an organ pipe inside plays realistic birdsong.

5. Yin and yang

The ancient Chinese philosophy of yin and yang, which explores opposing but complementary natural forces, led Chinese clients to prize watches made in pairs, reflecting the significance of this symmetry. Genevan watchmakers became renowned for the sumptuous paired watches that they produced for the Chinese market. Each watch displayed in the fifth showcase on our special tour is part of a pair. One, a musical watch made in about 1815 by the Genevan firm Piguet & Meylan and set in a heart-shaped case, depicts a picturesque lakeside scene with rotating windmill sails.

6. The incredible "Sympathique"

Few people ever get to see one of horology's rarest and most exquisite masterworks: an Abraham-Louis Breguet "Sympathique" clock. Only 12 of these timepieces are known to exist, and two are on show at the Patek Philippe Museum. Each comprises two parts: a finely made clock and a special pocket watch that can be inserted into a cradle on top of the clock at night. By 3 AM, a synchronizing mechanism will have wound the watch and set it exactly to time in a display of technical sophistication that remains hard to match even today.



*Venus Binding Cupid's Wings, paired watch, c. 1815,
H: 90 mm / W: 66 mm / D: 24 mm (Inv. No. S-133A)*



*The Sympathique of the Duke of Orleans,
table clock, 1836,
H: 62 cm / W: 28.8 cm / D: 23.6 cm (Inv. No. S-970A)*



*The Sympathique of
the Duke of Orleans,
pocket watch, 1835,
case Ø: 49 mm
(Inv. No. S-970B)*

7



The first perpetual calendar wristwatch, No. 222 033, 1925, case Ø: 34.4 mm (Inv. No. P-72)

*Minute repeaters
represent the
best watchmaking
skill and are
highly prized*

8



Minute repeating pocket watch, No. 25 225, 1864–66, case Ø: 51.3 mm (Inv. No. P-396)

7. Perpetual calendar

Watches can represent our position in a complex universe, and the seventh highlight from Mr. Stern's tour illuminates this fact. The first wristwatch to contain a perpetual calendar – a date indication that remains accurate for months of different lengths, even during leap years – was made by Patek Philippe in 1925, with a movement dating back to 1898. Before this, owners of calendar wristwatches were obliged to correct manually for months shorter than 31 days.

8. The sound of time

Watches do not just show the time; some sound it, too. Mr. Stern's eighth highlight is a Patek Philippe minute repeater made in 1864–66, a watch type produced by the firm since 1845. A repeater is a complication that chimes the time on demand. Some sound only to the nearest hour; others sound the quarters, half-quarters, or even five minutes. Minute repeaters, chiming down to the minute, represent the best watchmaking skill and are highly prized. Today, every Patek Philippe minute repeater is personally approved by the company president, Thierry Stern, before being dispatched to the client.

9



The first Patek Philippe repeating wristwatch, No. 174 603, 1916, case Ø: 27.1 mm (Inv. No. P-594)

9. Evolution of the repeater wristwatch

In the early twentieth century, demand for wristwatches was growing. Some complications, such as repeaters, were difficult to miniaturize for wristwatches, especially for those worn by women. Small wristwatch cases are less resonant than those for larger pocket watches, meaning sound quality was a challenge. In 1916, Patek Philippe introduced the very first five-minute repeating wristwatch for women, which is the ninth stop of this tour. The firm was able to draw on almost half a century of experience in making women's wristwatches.

10. The enameleur's art

The tenth display from Mr. Stern's personal-highlights tour contains a dress watch made by Patek Philippe in 1976. The back of its case is adorned with an enamel miniature, painted by the Genevan artist Suzanne Rohr,

of a girl beside a lake, based on Jean-Baptiste-Camille Corot's painting *Ville-d'Avray*. Such scenes could take a year or more to complete and often required a brush with only a single hair. Rohr, who worked for Patek Philippe from 1967 until 2002, was the last graduate of Carlo Poluzzi's famous enamel painting class at Geneva's École des Arts Décoratifs.

11. Carlo Poluzzi and his students

The miniature enamel portrait, entitled *The Gypsy Girl*, on this circa 1955 watch case was precisely created by Carlo Poluzzi. This piece forms the eleventh stop on our highlights tour. As a teenager in Geneva in the early twentieth century, Poluzzi completed an enameling apprenticeship, later becoming a full-time enamel artist in the city. Alongside creating his own miniature masterpieces, he also trained a younger generation of enamellers. One was Suzanne Rohr, who Poluzzi introduced to Patek Philippe after the then-president, Henri Stern, and his son, Philippe, had decided to rescue the endangered craft.

The Calibre 89 is a powerful statement of the watchmaker's art

12. The miracle of the Calibre 89

When Philippe Stern resolved, in the late 1970s, to meet the existential challenge of quartz watches by making the world's most complicated mechanical watch, the result was the legendary Calibre 89. Created to celebrate Patek Philippe's 150th anniversary, the model secured the company's future and helped to resurrect the mechanical watch. The final display of Mr. Stern's tour is the prototype of this remarkable piece. Comprising 1,728 parts and incorporating 33 complications, the Calibre 89 is a powerful statement of the watchmaker's art – an art that has been refined over centuries and not least by Patek Philippe. ♦



Ville-d'Avray, dress watch, 1976,
case Ø: 47.3 mm (Inv. No. P-258)



The Gypsy Girl, watch case, c. 1955,
case Ø: 48.5 mm (Inv. No. E-50)



Calibre 89, 1989,
case Ø: 88.2 mm
(Inv. No. P-1989)



STORY

Judith Benhamou-Huet

PHOTOGRAPHS

Silvia Draz

DUALITY IN DESIGN



When a Cameroonian designer and artist immersed himself in Japanese culture, he found commonalities in tradition and heritage between two sides of the world. Enter the African-Japanese kimono – a hybrid garment created to celebrate identity and inheritance, unconventionality with a shared sense of belonging, and a new aesthetic

"Make haste slowly, and without losing heart, return a score of times to perfect your art." The seventeenth-century French poet Nicolas Boileau-Despréaux's words resonate with the artist-designer Serge Mouangue, the creator of a hybrid type of kimono that fuses cultural traditions from different parts of the globe. As Mouangue himself puts it, "In this work I am fascinated by the constant search for perfection. The time spent composing, trying, trying again, improving."

Serge Mouangue was born in 1973 in Yaoundé, the capital of the West African country of Cameroon, but his parents emigrated to France when he was 6, and he was brought up in the banlieues of Paris. His father was keen for him to become a lawyer or an engineer, but an early talent for drawing took Mouangue instead to art school, then to study industrial design at ENSCI, the French national institute for advanced studies in industrial design, from which he graduated in 1999. A keen traveler, he spent his student years exploring France and visiting other parts of Europe, as well as venturing farther afield to Turkey, China, Mexico, and the USA. During a placement year in Australia, he interned with the architect Glenn Murcutt, who in 2002 won the Pritzker Architecture Prize. Also while there, Mouangue met and married his wife, and they had their first child.

Returning to Paris in 2000, Mouangue joined the concept-car design team at Renault's Technocentre, but in 2006, thanks to Renault's co-partner, Nissan, he got the opportunity to move to Japan, working in Nissan's Creative Box studio in Tokyo. He lived in Japan for the next five years, and the country and its culture was to be a revelation to him. As a Cameroonian in Japan, Mouangue was struck by the similarities between his homeland and the land of the rising sun. "Of course," he admits, "Japanese society is by nature rather strict, whereas in West Africa, improvisation is a form of survival. That being said, however, there is a great deal of common ground between the two identities. For example, the younger generation's relationship with the elders is a cornerstone of both cultures. Japan has a



very codified and hierarchical tradition. As in West Africa, the way in which you address a person will vary depending on whether it is a man or a woman, a person of expertise or not, or someone old, very old, or young.

"I also noted the relationship to the dead that exists in voodoo practice and the relationship to ghosts that is omnipresent in Shinto culture. In aesthetic terms, Punu masks [from Gabon, Central Africa, and often covered with a layer of kaolin clay] remind me of Japanese Noh masks. All of

Serge Mouangue's kimonos are hybrid creations that fuse the cultures of Africa and Japan. The fabric of the blue kimono (page 44) was patterned by the loincloth wax technique, inspired by Javanese batik. It is paired with an *obi* from Kyoto made of crafted silk. The *obi-age*, knotting the *obi* in place, is made from *kente*, a woven cloth from Ghana. The brown kimono (page 45) was inspired by the earth. Made from traditional *bogolan* fabric dyed with

an extraction of African birch leaves, or *n'galama*, it features a design drawn with fermented mud. The lining of the kimono coat, or *haori*, is embroidered in a style from Mauritania. A wooden hair comb from Cameroon completes the outfit. The print of the loincloth wax kimono shown above was inspired by electric circuits. The *obi* is made of fabric from Kenya, the traditional Maasai *Shuka*, also known as "African blanket"



Mouangue calls this glowing kimono Sunset Vibration. The cotton fabric with a batik-style hydrophobic wax design is paired with a silk obi that was made in Kyoto and traditional beaded bracelets from Cameroon



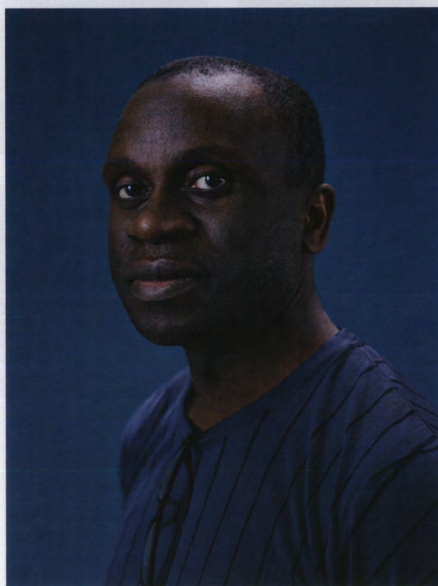
Serge Mouangue (shown opposite, inset) used Javanese-batik-inspired wax prints to create this long-sleeved kimono. Young Fire, as the piece is named, is worn with a silk obi that was made in Kyoto. The model wears a traditional *kanzashi* hair ornament from Kyoto with a wooden comb from Cameroon to finish the look

this led me to develop a language that I called my 'third aesthetic,' which does not really belong to either culture. It carves out a new path concretized by performance, clothing, sculpture, and visual arts."

After returning to France and Renault's Technocentre, Mouangue continued to develop his third aesthetic. Then, by 2016 he was ready to leave the world of car design. Meanwhile, visits to Kyoto saw him develop a growing interest in the *ne plus ultra* of Japanese traditional clothing, the kimono. "Kyoto is the birthplace of the kimono. It is the most natural thing to wear in Japan. In Japanese, kimono comes from *ki* (to wear) and *mono* (the thing)."

In order to steep himself in the culture of the kimono, Mouangue went to learn from traditional manufacturers. "I wanted to understand not only the history of this garment but also its codes, its cut, its proportions, its assembly, and also the use of accessories, of which there are a great number. I began by working with Kururi in Tokyo and then Odasho in Kyoto. The kimono is a complex garment to put on because of its system of folds. It can take

of Cameroon, made up of strips of fabric decorated with geometric figures in white and blue). "Fabrics from West Africa are extremely rich," explains Mouangue. "I use them in combination with silk obis from Kyoto to create this mixture of genres, this third aesthetic. We spend a lot of time on



But the designer's African identity is never far away. He says that in order to gain acceptance in the traditional structure of Japan's culture he chose to act according to the tradition of his birth rather than behave like the Japanese person that he is not. And this worked. As he explains, "[In Japan] it was very important to respect the hierarchical systems to the letter, using the body language I was taught as a child."

Marrying the kimono tradition to the cultures of West Africa was quite a gamble, but it proved a highly successful one. The turning point came in 2008 when the *Japan Times* devoted a major article to Mouangue's work. Things snowballed after that. The Museum of Art and Design in New York commissioned him to design another hybrid work that combines the technique of Japanese lacquer with Pygmy sculpture.

His work is also increasingly seen abroad. In 2020 London's Victoria and Albert Museum devoted an exhibition to kimonos and included some of Mouangue's designs. His works in the collection also featured in a BBC television program about the museum. In 2022 another invention of his

"My 'third aesthetic' carves out a new path, concretized by performance, clothing, sculpture, and visual arts"

up to an hour if you want to arrange it properly. This correct way of putting it on is ultimately just as important as the material it is made from. The method of belting the garment in place with an *obi* [the traditional belt] and the way the obi is tied are also highly sophisticated."

Mouangue's own unique contribution to all this was to create kimonos using unconventional textiles. He uses African fabrics such as *bogolan* (a traditional Malian cotton fabric made up of strips sewn together and dyed with earth), wax prints (a sub-Saharan African type of cotton material that is made with batik-inspired printing), and *ndop* (a fabric from the Bamileke people

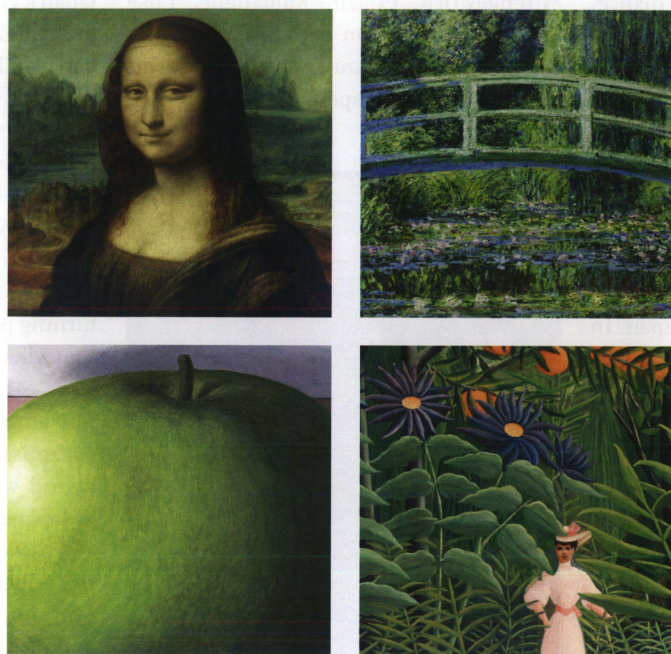
kimono designs. Some of these kimonos are made to be displayed, others are to be worn." Mouangue works mainly with the house of Odasho in Kyoto, a family-owned firm that has been making kimonos for more than one hundred years.

As a designer, Mouangue's job could be described as that of composition. "At Odasho, my work consists of procuring fabrics and making kimonos with patterns that are repeated harmoniously on the garment. Achieving harmony between the cut and the pattern takes great precision. I also take great care with dyeing the silk for the obis in Kyoto water, which in the Japanese tradition is considered to be the purest."

third aesthetic will be exhibited at the Musée du Quai Branly in Paris. In this new piece, Mouangue will make a connection between the weaving of Japanese *ikebana* baskets and the hairstyles of peoples in West Africa.

Today, Japanese people, too, have begun to wear his kimonos, attracted by their unusual patterns and lighter, less constricting fabrics. "One good thing about them is that they provide a certain freedom," Mouangue explains. "People like to use my kimonos, because they escape some of the etiquette of the Japanese tradition." Perhaps his third aesthetic shows a new way forward for an ancient tradition. ♦

Translated by Charles Penwarden

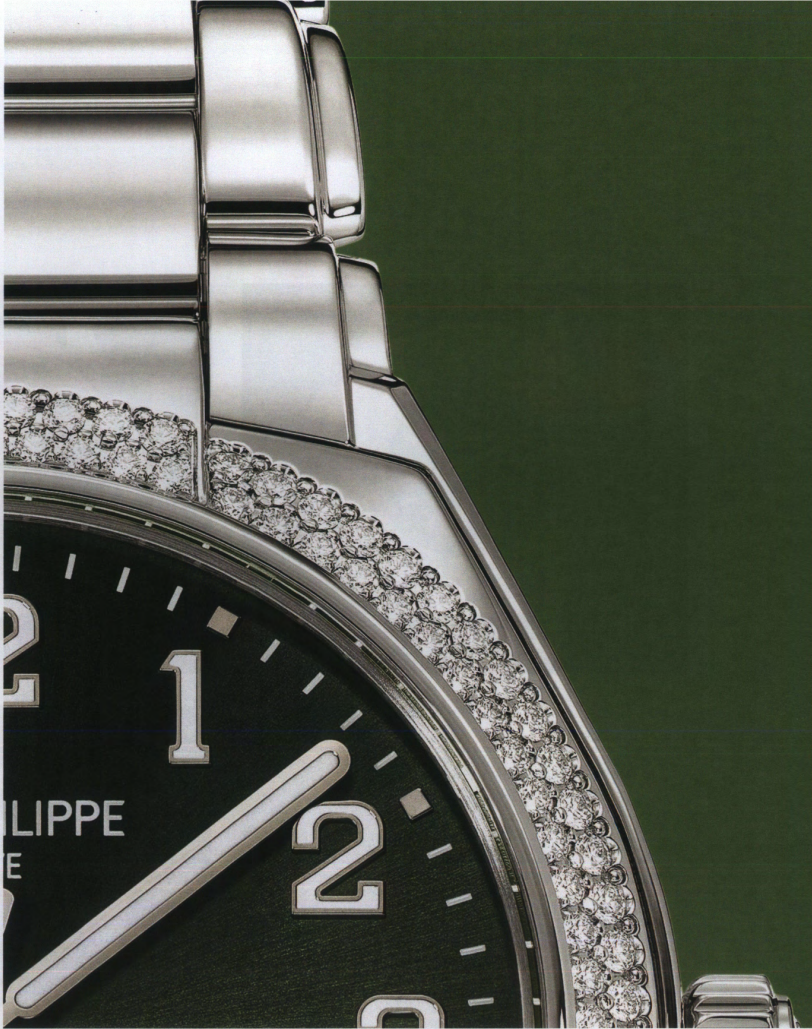
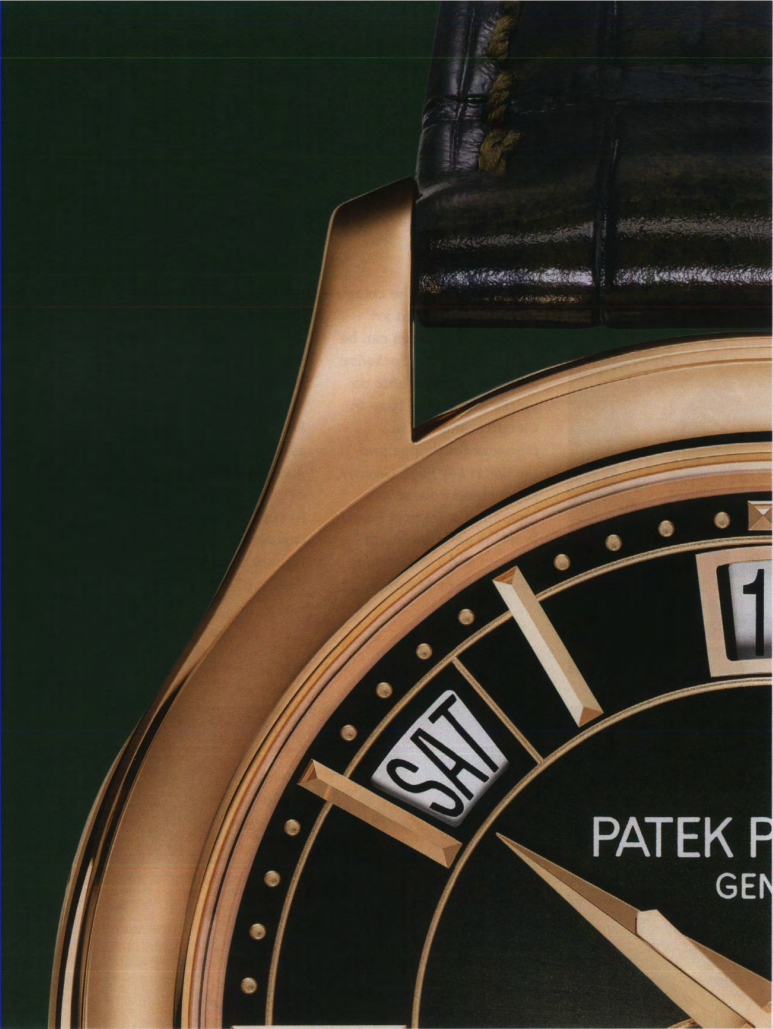


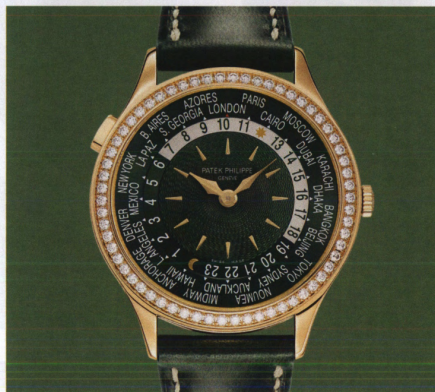
STORY *Waldemar Januszczak*

GLORIOUS GREENS

Artists have long understood how a color, not only in aesthetic terms but also emotive, can summon up subconscious connotations and inspire feelings through resemblances or the play of the light reflections on the eye.

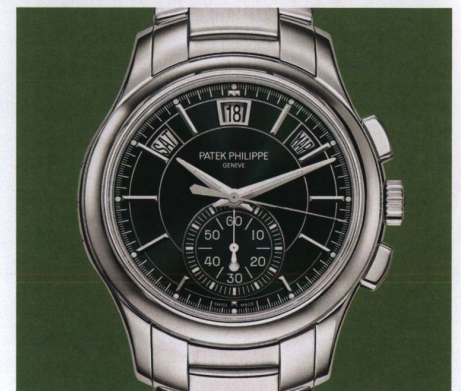
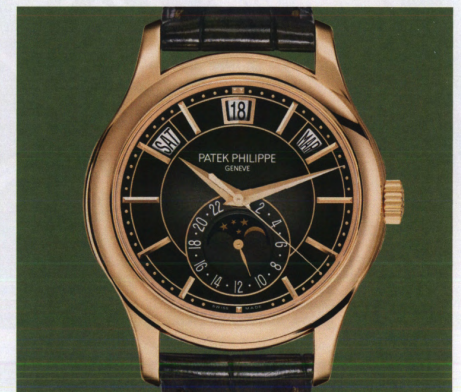
At Patek Philippe, this respect for the painter's palette informs watch design





Previous spread: the color green being used in art across the centuries can be seen on page 50, clockwise from top left: Leonardo da Vinci's *Mona Lisa*, 1503–6; Claude Monet's *The Japanese Footbridge and the Water Lily Pool*, Giverny, 1899; Henri Rousseau's *Woman in a Tropical Forest*, from the early twentieth century; and *The Listening Room* by René Magritte,

1958. Clockwise from top left, page 51: Patek Philippe has also embraced green for use on various watch dials, as can be seen on the Annual Calendar Moon Phases REF. 5205R-011 as well as the Twenty-4 Automatic REF. 7300/1200A-011, the ladies' World Time REF. 7130R-014, and the casual, modern Aquanaut Flyback Chronograph REF. 5968G-010



"Green, how I want you green. Green wind. Green branches. The ship out on the sea and the horse on the mountain."

Romance Sonámbulo, Federico García Lorca

As you sit there looking at the new Patek Philippe Annual Calendar Moon Phases REF. 5205R, loving the subtly shifting tones of its olive-green dial, wondering how it manages to slide toward black from some angles, then glow like an uncut emerald from others, a useful question to ask yourself is, what color is the *Mona Lisa*'s dress?

You probably won't be able to answer right away. The *Mona Lisa* may be the world's most famous painting, but she doesn't sit in the memory in a full-color way. She's beautiful, yes. She's mysterious, of course. Her smile haunts you. But her colors aren't obvious.

It's also true that she hasn't been cleaned thoroughly since she was painted, a little more than five hundred years ago, and in that time a zillion candles have been lit in front of her and a million cigarillos smoked beneath her, causing a thick film of

discolored varnish to obscure her true coloration. If that layer of browned varnish was removed, if she were cleaned and held up to the light, you would see that her dress is almost the same shade as that Patek Philippe olive-green dial. Green with hints of the forest and a glimmer of submerged emeralds. Green but with shadows and mysterious flavors. Green but not loudly so. She's a subtle masterpiece. As is the REF. 5205R.

Lisa Gherardini – the *Mona Lisa*'s true name – was the wife of a wealthy silk merchant from Florence. Her dress is Patek Philippe green because green in the Renaissance world was the color of success. Kings, princes, and popes wore red, burgundy, and purple. But silk merchants and bankers, gold traders, and importers of luxury goods wore green. In Jan van Eyck's *Arnolfini Portrait*, 1434, the bride of the Flemish textile merchant Giovanni Arnolfini is also gloriously attired in a viridian dress lined with the skins of two thousand squirrels. She is, quite literally, wearing a fortune. In the Renaissance world, green was the color

of prosperity and good luck, of mercantile skills and business wealth.

But that's the Renaissance world. In other places and at other times, viridescence has gone on a twisty journey through different human emotions. It may be the most abundant color on earth – we're not just talking chlorophyll here: from the right angle, even the oceans look green – but it is also the one with the most shades.

During one of his downtimes as an artist, the painter Paul Gauguin went to Panama

to work on the digging of the great canal, and on his way home to France he stopped on the island of Martinique, where he painted a set of gorgeous tropical views looking down on the jungle as it fell toward the sea. I stood in front of the greatest of these views once and tried to count how many exact shades of green Gauguin had used to paint the jungle canopy. I gave up after 30. There were too many.

That's the thing about green. It's elusive. It shifts easily between forms and tones, and has a rare colorific ability to change before your eyes. Red is always red. Yellow is always yellow. But green has a way of tiptoeing onto the territory of the other colors, onto blue, onto brown, onto black.

Watch a peacock from one angle, and it will appear blue. But step to the side, and it becomes green. So it is with the olive-green Patek Philippe Annual Calendar Moon Phases REF. 5205R. It is simultaneously one color and many colors.

When Gauguin's artistic buddy Vincent Van Gogh painted a self-portrait to present

to his friend, he shaved off most of his hair in the fashion of a Japanese monk and gave himself a background of bright and astonishing malachite green. It went with the color of his eyes. But it also evoked the Buddhist spirits that he was hoping to summon to his side.

Green has a powerful past. Its first great masters were the ancient Egyptians. When the British archaeologist Howard Carter discovered the untouched tomb of Tutankhamun in 1922, he found a paintbox

containing green pigments buried with the king, for Tut to take with him to the afterlife. In the Egyptian worldview, green was a symbol of regeneration and rebirth. Its hieroglyph, a growing shoot of papyrus, was a mark of fertility and life.

To make green pigment, the Egyptians would pound rocks of beautiful malachite into a fine powder, and then they would rub it around their eyes to protect themselves from evil. A breastplate also found in Tutankhamun's tomb had a scarab beetle at its center, carved from a greenish-yellow stone that no one recognized. Scarab beetles, with their Patek Philippe sunburst-dial-like glimmer, were a familiar component of ancient Egyptian jewelry. But Tutankhamun's scarab was made of something mysterious. Only recently have archaeologists discovered it was actually carved from Libyan desert glass, one of the rarest substances on earth, formed when meteorites strike the sands of the Sahara.

When you deal with green, you tiptoe onto the territory of the gods.



Page 52: in the current collection, Patek Philippe has used hues of green to differing effect. The palette includes a vivid green, as seen on the dial of the World Time Flyback Chronograph REF. 5930P-001, and, taking inspiration from vintage cars, a lacquered and black-gradated classic racing green for the Perpetual Calendar Chronograph REF. 5270P-014 (top row, left and right respectively). The

dial of the ladies' World Time REF. 7130R-014 (middle row, left) is olive green, and the Annual Calendar Moon Phases REF. 5205R-011 (middle row, right) has a sunburst olive-green dial with black gradation. Also in sunburst olive green is the Annual Calendar Flyback Chronograph REF. 5905/1A-001 (bottom row). Page 53: olive green can be found in the elegant ladies' Twenty-4 collection,

such as the models shown to the left – the Twenty-4 Automatic REF. 7300/1200A-011 (top) and the time-only Twenty-4 REF. 4910/1200A-011 (bottom). Three sporty models feature a khaki-green shade: the Aquanaut REF. 5168G-010, the Aquanaut Luce REF. 5267/200A-011 (middle column, top and bottom), and the Aquanaut Flyback Chronograph REF. 5968G-010 (above right)

Journeying beyond the painters' verdant palette, Nazanin Lankarani here explores how the color has been used in different guises, to different effects, across the collection at Patek Philippe. Through the decades, dials in tones of green have appeared only every so often but increasingly recently

In the 1970s, mineral-green malachite dials added a touch of bohemian chic to the wrist of Patek Philippe fans who had a playful sartorial sense. Jasper or jade occasionally decorated the brand's precious desk clocks. Still, green options were a rarity, and the venerable Swiss timepiecemaker mostly adhered to a principle of timeless classicism, preferring the calm quiet of silvery whites and elegance of steely grays to, say, the drama of fire-engine reds or the fantasy of Veronese greens.

Hardstone dials aside, it is difficult to pinpoint the precise date when green first appeared on the color spectrum of Patek Philippe's wristwatches. In 2004, the Aquanaut Luce REF. 5067A-013, decked out in Adventurous Khaki, gave a hint of the possibilities of green on a Patek Philippe dial and composite strap. This was, arguably, a timid teaser in a women's model, and men had to wait another 15 years for a green Aquanaut to come along. But when it did, the time-only REF. 5168G-010 signaled an exciting new chromatic chapter for men, with a sporty chronograph model, the REF. 5968G-010, following soon after.

Today, the company has not settled on a single, formulaic shade of Patek Philippe green, like Ferrari red or Tiffany Blue®. Instead, it has opted for a painterly palette of varying green hues. The 2022 lineup offers four new green-dial watches that bring freshness and character to familiar models. Each green is chosen to enhance the specific model, starting with the Annual Calendar Moon Phases REF. 5205R-011, with an olive-green sunburst black-gradated dial in a rose gold case that creates an aesthetically pleasing transition of light and color. A similar effect is achieved with the sunburst decoration of the dial on the new ladies' Twenty~4 REF. 4910/1200A-011, introduced with an olive-green sunburst dial on a steel *manchette*. The straps also play a part in the complementary design: the Annual Calendar Moon Phases REF. 5205R-011, for example, has a two-tone, hand-patinated alligator strap in olive green.

A sober shade of olive green adorns the ladies' World Time REF. 7130R-014, offsetting its hand-guilloché detail and old-basket-weave motif and toning down the effervescence of its diamond-set bezel. Slightly more eclectic is the Perpetual Calendar Chronograph REF. 5270P-014, which, with a lacquered dial encased in platinum, might suggest to some a return to a safe classicism, yet it promptly disrupts that illusion with its bold, green finish, just as its shiny black alligator leather strap sings with contrasting green hand-stitching.

What is certain is that this year's lineup demonstrates the versatility of the green dial in subtle variations of color designed to enhance the model – be it complicated or time-only – by countering the transient effects of light to achieve a perfect balance between aesthetics and legibility. ♦



REF. 5270P-014
Perpetual Calendar Chronograph
Case Ø: 41 mm
2022



REF. 5267/200A-011
Aquanaut Luce
Case Ø: 38.8 mm
2021



REF. 5930P-001
World Time Flyback Chronograph
Case Ø: 39.5 mm
2021



REF. 7130R-014
Ladies' World Time
Case Ø: 36 mm
2022



REF. 5205R-011
Annual Calendar Moon Phases
Case Ø: 40 mm
2022



REF. 5905/1A-001
Annual Calendar Flyback Chronograph
Case Ø: 42 mm
2021



REF. 5168G-010
Aquanaut
Case Ø: 42.2 mm
2019



REF. 5968G-010
Aquanaut Flyback Chronograph
Case Ø: 42.2 mm
2021



REF. 4910/1200A-011
Twenty-4
Case: 25.1 mm x 30 mm
2022



REF. 7300/1200A-011
Twenty-4 Automatic
Case Ø: 36 mm
2021



P O R T R A Y E D
I N G O L D

As refreshingly realistic likenesses, these exquisite and rare gold-glass disks transport us back through the ages to the men, women, and children we call “ancient Romans.” What can these portraits tell us about the lives and artistic traditions of the Later Roman Empire? Christopher Stocks investigates

They look directly into our eyes with an arrestingly calm, clear gaze. Their expression is sometimes tender and loving, sometimes stern and serious, but there seems to be no doubt that these are real people, even though they lived and died around 18 centuries ago. These haunting portraits, painstakingly executed in gold leaf that has been sandwiched between two layers of glass, are astonishingly rare survivals from ancient Rome. Examples of depictions in this medium can be counted only in the hundreds, and of these, fewer still appear to portray real individuals rather than standardized pagan, Christian, or Jewish scenes. What

we know of their origin is fascinating, though there is much about them that we still don't and may never know.

Most of the gold-glass pieces that survive today originally came to light, quite literally, in Rome, many of them having been discovered in the catacombs – those vast subterranean cemeteries that lie just outside the ancient city's walls. Around 60 of these tomb complexes are known today, some of them with over 12 miles of underground passages, the lower levels of which can be more than 60 feet deep. Though the catacombs were originally used by the city's Jewish community, they were increasingly

adopted by Christian (and some pagan) sects, who believed in the resurrection of the body and wished to bury their dead rather than follow the usual Roman practice of cremation. Between the second and late fourth centuries, the catacombs underneath Rome became the final resting place for thousands of people. However, when Christianity was adopted as a state religion in AD 380 and churches began being built, the underground catacombs were largely abandoned in favor of open-air cemeteries.

Eventually, the very existence of Rome's catacombs was forgotten, and it wasn't until 1578 that they were rediscovered when laborers digging in a vineyard accidentally broke into one of the underground burial chambers. Over the next couple of centuries, excited antiquarians and dastardly tomb robbers, armed with candles and pickaxes, explored mile after mile of underground passages that had been cut into the soft tufa rock and honeycombed with burial niches, many of them still sealed with marble slabs or bricks. Some of these tombs were decorated with frescoes and inscriptions. But just occasionally, a glint would have caught the early explorers' eyes, for set into the plaster on the walls in a few of the tombs were circular pieces of deep blue glass with allegorical stories and ancient faces depicted in shimmering gold.

Pried away from their surrounding plaster, many of these gold-glass roundels soon found their way into the private collections of cardinals and aristocrats. Most of the portraits were later subsumed into the vast labyrinth that is the Vatican Museums, though there is a small group in the British Museum in London, and a scattering of others can be found elsewhere in Italy and in the Metropolitan Museum

Opposite: this roundel, now housed in the Metropolitan Museum of Art, New York, was likely once worn as a pendant. The 1.7-in-diameter portrait of a mother and son is said to have been found at Hadrian's Villa, Tivoli, in Rome, but might have been made in Alexandria, Egypt.

Left: when it was found in 1926, in the catacomb of San Panfilo in Rome, this gold-glass portrait of a married couple was backed by a tile. The inscription (partly visible) “*Greco Ribibetpropinatuis*” may translate as “Gregory, drink and drink to thine”



of Art in New York. Their rarity is such that there are few, if any, in private hands, and their value is impossible to gauge.

But how did these delicate glass artworks end up underground, where few of them would ever be seen? Early scholars assumed that the roundels must be grave markers, created for the purpose of commemorating the individuals buried within, but that theory was soon challenged. Once removed from the plaster walls, it became apparent that, far from being designed as roundels, many had likely once formed the base of a cup or vessel. Though each image was framed by a neat, perfectly circular ring of gold, the disks' outer edges were often chipped, indicating that they could have been broken away from a vessel before being plastered into place.

We know from ancient writers that the tradition was for families to gather for a valedictory meal by the side of a grave, so another theory was that the cups were used at these feasts and then incorporated into the wall of the tomb. However, some of the gold-glass images are framed by inscriptions that extend wishes for good health and a long life, which would be peculiar sentiments to express in the context of a funeral. Instead the portraits were perhaps either commissioned by or presented to their owners in their lifetime to celebrate an occasion such as a wedding or a coming-of-age ceremony. As treasured possessions, they would have been buried with their owners.

The particularly fine and realistic gold-glass portraits seen on these pages, however, were likely made to be worn as pendants, perhaps as keepsakes for those traveling abroad or for the family they left behind. These portraits were made, as far as we can tell, during the third and fourth centuries AD, probably in Rome, using a technique that had been developed in Hellenistic Greece. First, a glassblower would create a base disk of blue glass, allow it to cool, and grind its edges smooth. Next, an artist would apply a layer of gold leaf, adhering it with a solution of gum arabic or rabbit-skin glue. The artist would then create the portrait, using a stylus to scratch and pinprick the design into the layer of gold leaf. Finally, the glassmaker

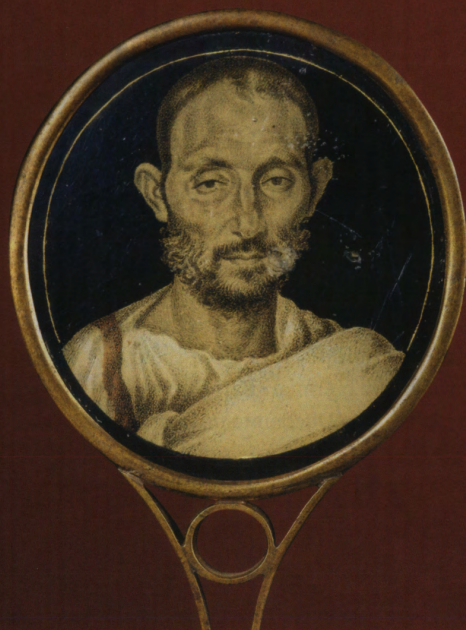


Inside the tombs, occasionally a glint of deep blue glass and shimmering gold would have caught early explorers' eyes

would reheat the base disk and then put another disk of freshly blown transparent glass onto it, sealing the gold-leaf image.

Though the majority of surviving pieces of gold-glass work show Christian, Jewish, or pagan scenes and are crudely executed, these realistic portraits of specific people have been created using a brilliant technique that resembles painted brushwork. What's more, these "brushed" portraits are so very similar in style that there is a possibility they were all made by the same artist, working with a single glassmaker in Rome. Intriguingly, several of the surviving inscriptions were written in Alexandrian Greek, suggesting that the sitters, and perhaps the artist (or artists), may have originated in Egypt.

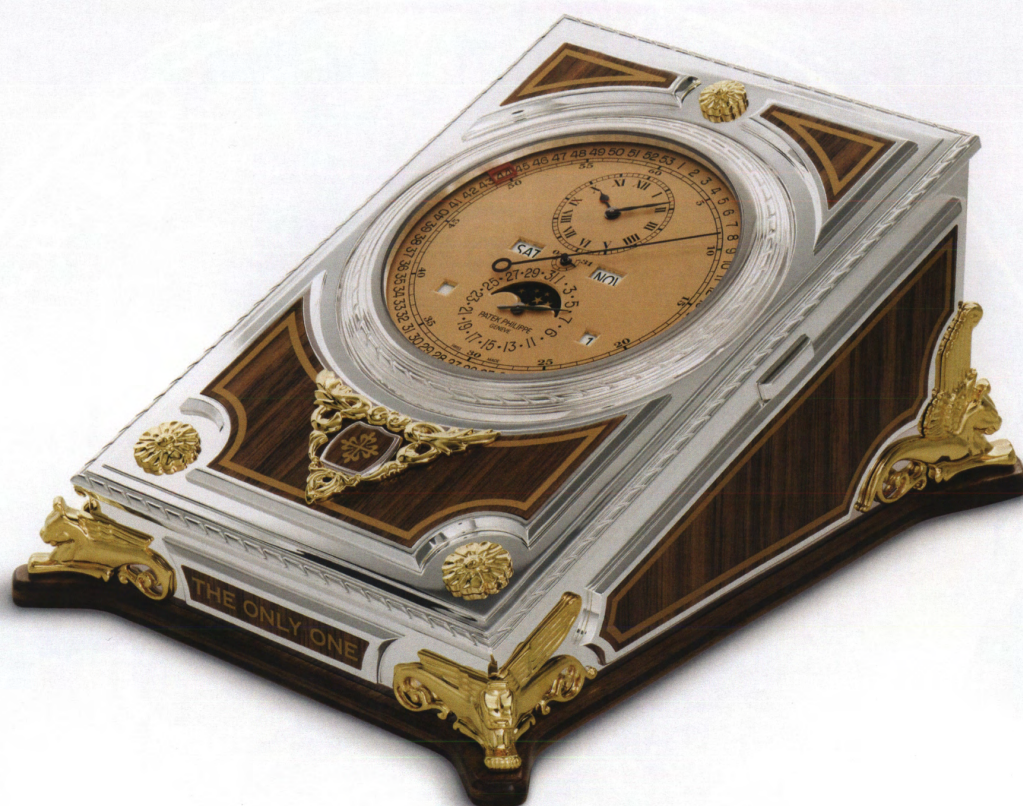
If that was indeed the case, it raises the possibility that these portraits developed out of the same tradition as the only other surviving late-Roman pictures that seem to depict real people and that also come from Egypt: the mummy portraits from the Faiyum basin, dating from the first to the third century AD. Those beautiful pictures, created by painting with pigments mixed into wax, share strong stylistic similarities with these gold-glass portraits, though sadly we do not know whether there were any connections between the two art forms. Whatever their origins, these wonderful gold-glass survivals are an insight into life in the Later Roman Empire, even if, like their owners, they took their secrets to the grave. ♦



Opposite: this portrait pendant of a young man dates to AD 250–300 and could have been made to mark his success in a musical contest, as the Greek inscription on it reads “Gennadios, most skilled in music.” Left: the unknown man in this 1.7-in-diameter portrait in the Archaeological Museum in Arezzo, Italy, is known as Saint Ambrosius, though it was made several decades before he lived. Above: a triple portrait of a mother with her son and daughter that was probably made in Alexandria; its inscription is untranslatable

but appears to be in an Ancient Greek dialect from Egypt. The piece is one of 50 gems that were, in the eighth or ninth century, set into a processional cross, known as the Desiderius Cross, for a monastery in northern Italy (now kept at the Museo di Santa Giulia in Brescia, near Milan). Right: this third-century portrait of an unknown man, found in the catacomb of San Callisto in Rome in 1878, was likely made as a pendant and is 1.9 in across. It has an inscription that is not fully understood but in part means “sweet soul”





Making history

Patek Philippe's piece for the biennial Only Watch charity auction in 2021 was an unexpected marvel, created as a combination of historical reference and state-of-the-art horology. Nicholas Foulkes relishes the story of its making

Disruptor is not a description that would usually be applied to Patek Philippe. But cast your mind back to 2021 and ponder for a moment the decisions taken by Thierry Stern. He brought out the sort of watches for which Patek Philippe is famous: the REF. 5236P In-line Perpetual Calendar and the minute-repeating "Advanced Research" REF. 5750P that introduced the fortissimo "ff" amplifier module. These are the sort of surprises to be expected from the marque.

However, Patek Philippe's 2021 is more likely to be remembered for surprises that were less expected; surprises that make the brand as much of a disruptor as it is a guardian of traditional watchmaking savoir faire. There was the discontinuation of the world's most sought-after watch, the REF. 5711; the announcement of a valedictory release of a REF. 5711 version with an olive-green dial; and the final series, limited to just 170 pieces with a Tiffany Blue® dial (one for each year

of the partnership between the US jeweler and Patek Philippe). Also, do not forget the introduction of a new hand-wound Calatrava, the REF. 6119 (when orthodoxy decrees that self-winding movements are preferred).

Perhaps least anticipated of all was the Patek Philippe timepiece sold at Only Watch, the biennial charity auction in aid of research into Duchenne muscular dystrophy. Those expecting a unique Nautilus model or a one-off grand complication such as the

The design of the Only Watch desk clock (pages 60–62) was inspired by the desk clock made for James Ward Packard almost a century ago (see page 63). The case of the new clock is made of silver with veneers of American walnut wood

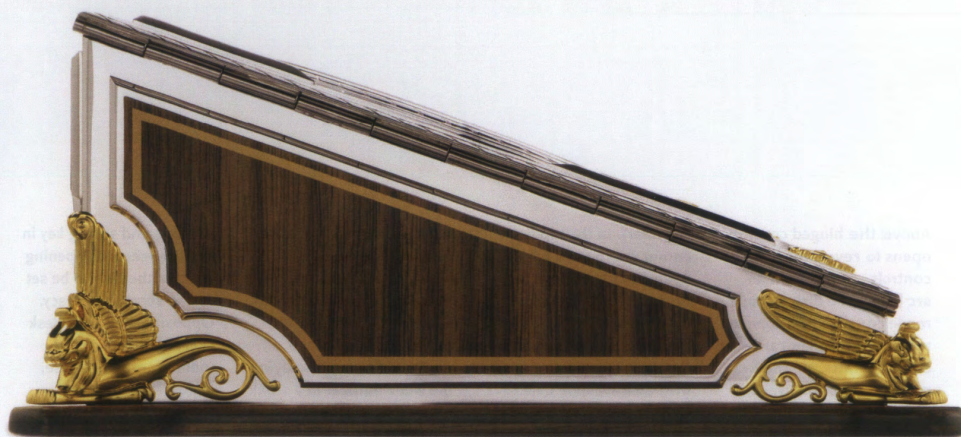
in reference to Packard's homeland. The silver-gilt decorative motifs include acanthus scrollwork framing the Calatrava cross, rosettes, and four griffon vultures. The hands are blued-steel, matching those on the old Packard desk clock

Grandmaster Chime that, in 2019, sold for an incredible CHF31 million (almost US\$31.1 million) were confounded when Patek Philippe presented a wooden-cased, wedge-shaped paperweight desk clock.

However, students of the history of Patek Philippe immediately recognized one of the most important creations from a seminal point in the brand's story. The 1920s was the last decade during which the firm was owned and run by descendants of its founders; it was also the decade during which the two most famous collectors of the marque were at the apogee of their activity: James Ward Packard, an inventor, engineer, and the eponym of the car company, and Henry Graves Jr., a scion of a New York financial dynasty.

Among the myriad masterpieces created for these two collectors during the brief golden age between the First World War and the Great Depression was a wedge-shaped yellow gold and silver perpetual calendar moon-phase desk clock (Patek Philippe Museum Inv. No. P-140). It was delivered to Packard in 1923, and another almost identical model was sold by Tiffany & Co. to Henry Graves Jr. in 1927 (Inv. No. P-1270). Fast-forward one hundred years to the 2020s, and the most disruptive thing to hit the market in 2021 was a timepiece made according to a design that was a century old. "It's very interesting to be in the early 2020s and to bring out a piece that in a sense is completely out of its time, because this is not something that people expect today," says Thierry Stern.

But while it may have been unexpected, the REF. 27001M-001 desk clock sold for CHF9.5 million (almost US\$10.5 million), and according to Thierry Stern, whoever bought it bagged themselves a real bargain. "I'm pretty sure in the future the price of this clock will just go so high," he says,





Above: the hinged cover opens to reveal the setting controls. Arranged in an arc below the dial, a shape made possible by a complex system of mechanical countershafts, are the five correctors, for the week; day; moon phases; month; and date (C standing for

calendar). In the top right corner are the two key openings for setting the time and winding the movement. On the top left, the key is kept in its recess. Right, from top to bottom: the Patek Philippe Calatrava cross on the clock's cover is surrounded by acanthus

scrollwork; the innovative system for ejecting the winding and setting key from its socket is patented; a useful addition on the new clock's dial is the weekly calendar, displaying the week number in a small frame that moves around the outer scale; turning the

winding and setting key in the stop-seconds opening enables the time to be set to one-second accuracy. Opposite: Packard's desk clock of 1923, with his monogram on the case, is now housed in the Patek Philippe Museum in Geneva (Inv. No. P-140)



"This clock is really unique. I put everything I learned over the years about watchmaking into it"



describing a sharp upward curve with a sweep of his hand. "It's really unique. It's something that nobody else is doing today. It's an in-house movement. I put everything I learned over the years about watchmaking into it. It's important that we can preserve this type of desk clock, it's part of our DNA."

With its regulator-style dial and circumferential scale for the week number (in place of the date on the 1923 Packard clock), the outer resemblance of the twenty-first-century clock to its predecessor is uncanny, but beneath the silver, silver-gilt, and walnut exterior everything is different.

In the 1920s, for the Packard model, Patek Philippe repurposed an eight-day pocket watch movement with two barrels, a straight-line lever escapement, and eight-day power reserve. This time Thierry wanted to make the movement from scratch. The seven-year journey required nine new patents to arrive at a movement of 919 parts. The caliber 86-135 PEND IRM Q SE has three spring barrels connected in series. The clock will run for 31 days at a remarkable level of precision, with a maximum deviation of +/- a single second per day. To distill what that means, it is the near perfect manufacture, arrangement, adjustment, and coordination of the action of almost one thousand components to be accurate to within just one of the 86,400 seconds that make up a day.

The man given the task of delivering on the object in which Thierry Stern enshrined his entire knowledge of horology was the brand's head of research and development, Philip Barat. "For years, Thierry Stern was talking about how he would like to make a clock like the Packard desk clock. But I said, 'Mr. Stern, this is not our cup of tea.' Nobody believed in it, but he insisted." Eventually, Barat agreed to take on the challenge.

"At first, the idea was to adapt the principle of the dome clock whereby a mechanical movement is rewound every eight days by a battery-driven motor," says Barat. "But one of the watchmakers said that would be a pity because it's such an amazing movement and that we should make it all mechanical. Thierry was convinced, and said, 'But I don't want eight days' power reserve, I want one month, I want 31 days.' I was concerned that the accuracy of the desk clock would not be very good, but Thierry wanted to achieve plus or minus one second per day for the whole month," Barat recalls ruefully. Everything was designed to minimize power consumption and prolong the reliability over 31 days, "and that's the reason we developed nine patents for the movement."

As well as a patent for limiting movement of the large lever to save energy when not active and one for optimizing the performance of the stop pawl to reduce energy

consumption by the perpetual calendar, there is a patented ratchet restraint that ensures the correct rotation, alignment, and stability of the three mainspring-barrels. These barrels benefit from another patent, enabling them to be used in both directions with the aid of an intermediate barrel that rotates in the opposite direction to the other two.

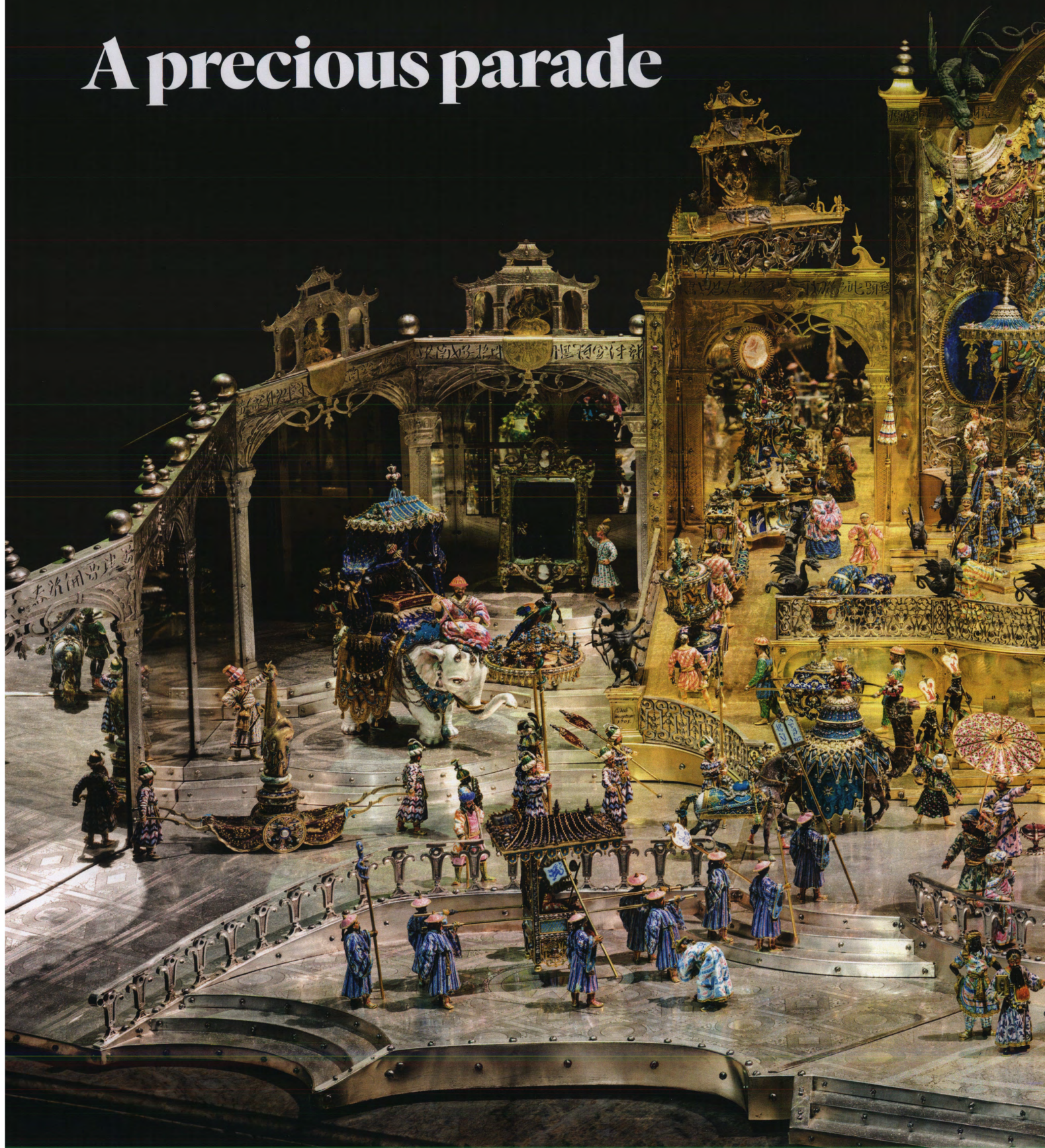
To maintain the level of precision over a month, stable amplitude was crucial. This is guaranteed by a patented constant force mechanism assuring stability of the balance amplitude from the first to the last day of the power-reserve range. And though the power reserve would show empty after 31 days, the patented elastic endpoint and connection to the wheel-train let the movement continue to run, rather like the reserve tank of a car.

But when asked what was the project's biggest challenge, Thierry smiles fondly and answers, "Convincing my dad. When I saw the price at the auction, I was confident that people will follow our thinking. Of course, I didn't build a movement just for one single piece. There will be a small series. I don't know when the next one will be ready," he says, "but I hope that we will be successful."

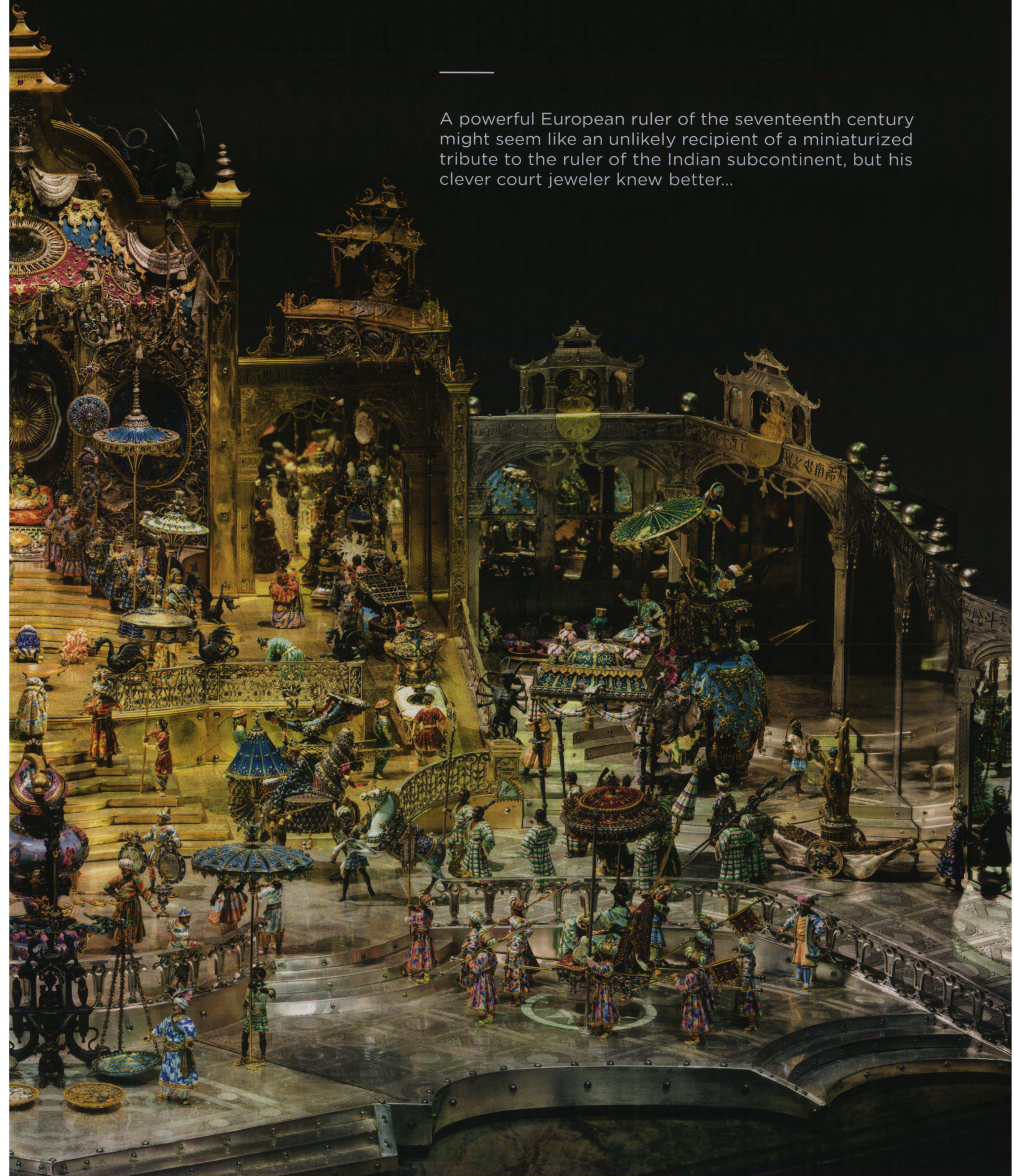
For now, however, Thierry is content with the piece for Only Watch. "It's gorgeous," he says. Just one thing bothers him: "To tell the truth, I never like doing this type of auction because I want to keep the pieces." ♦

STORY Franzobel

A precious parade



A powerful European ruler of the seventeenth century might seem like an unlikely recipient of a miniaturized tribute to the ruler of the Indian subcontinent, but his clever court jeweler knew better...



In the early eighteenth century, the lands where pepper and spices grow – Arabia, India, China, Egypt – seemed impossibly far away to Europeans; no one at this time had any clear idea of what these empires were actually like. Yet burgeoning trade with the mysterious East gave intriguing glimpses into these exotic realms on the other side of the world, the empires of tea and ivory, silk and spices, porcelain and pearls. The West developed an insatiable appetite for the luxuries of the East, but the East also influenced European culture. Non-white figures reclined in rococo reliefs, while grand bedrooms were hung with Chinese wallpaper, and (after much trial and error) porcelain was finally recreated in the Saxon town of Meissen. But perhaps the most stunning as well as the most expensive product of this cultural cross-fertilization is the *Grand Mogul's Throne*, created between 1701 and 1708 by the great goldsmith Johann Melchior Dinglinger.

Born in 1664 in the Imperial Free City of Biberach in what is now the south of Germany, Dinglinger learned the skills of his art in Nuremberg, Augsburg, and Vienna before settling in Dresden in 1692. Once there, as he had presumably intended, he came to the attention of its ruler, Augustus II, known as “the Strong,” Elector of Saxony (1670–1733), who appointed him the court jeweler in 1698.

Today, Augustus is a familiar figure to anyone who visits Dresden, thanks to the golden equestrian statue that stands at the entrance to the New Town. He was the archetype of an absolute ruler, despite being a hapless military commander who lost Poland and Lithuania to Sweden, and only retained his kingdom thanks to the support of the Russian tsar, Peter the Great. Yet he was also one of the greatest collectors of his age, acquiring so many natural and man-made wonders that he had to build an entire palace to house them.

Dinglinger's designs for Augustus the Strong included a gold coffee service, flower bouquets made from precious stones, and the *Bath of Diana*, a magnificent chalcedony cup with a figure of the goddess bathing. But the *Grand Mogul's Throne* is his masterpiece. Though it appears to have been made speculatively rather than as a commissioned piece, it is arguably the most scholarly work of the German baroque. It was also the most expensive: Augustus paid 50,000 thalers for it in 1709, which was around the same amount as he had paid for a large country estate two years before.



Pages 64–65: the *Grand Mogul's Throne*, like a stage set in miniature, measures 23 in x 56 in x 45 in. Above: the pinnacles of the scenery suggest a splendid palace surrounding the ruler, including this shrine to a four-armed goddess flanked by dragons and serpents.

The maker, Johann Melchior Dinglinger, identified this figure as the Hindu goddess Bhavani. Opposite: the *Grand Mogul*, Abul Muzaffar Muhi-ud-Din Muhammad Aurangzeb, sits on his throne watching the magnificent celebrations for his 50th birthday

Working with his two brothers and a few assistants over a seven-year period, Dinglinger produced a miracle of the goldsmith's and enameler's arts, executed to an astonishing level of detail. Though it has lost almost four hundred precious stones and

pearls over the centuries, the *Grand Mogul's Throne* still glitters with no fewer than 4,909 diamonds, 164 emeralds, 160 rubies, 16 pearls, 2 cameos, and a single sapphire.

The subject in itself is remarkable – not a battle or a saint's story but the splendor of a foreign ruler's court. On a gold-and-silver stage set of around four feet square are 132 skillfully fashioned figures and 32 movable items, most no more than two to two-and-a-half inches high, that allow their owner to play puppet theater with the most powerful potentate of the period. The arrangement is reminiscent of a Christian

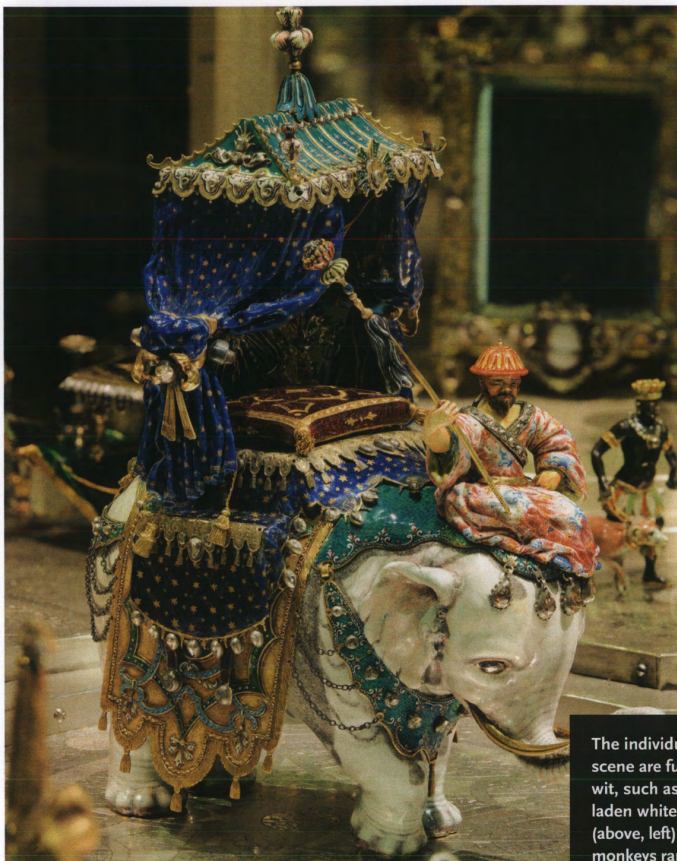
Christmas nativity scene, though it shows not the Holy Family but the birthday celebration of Abul Muzaffar Muhi-ud-Din Muhammad Aurangzeb (1618–1707), the ruler of the Indian subcontinent for a period of 49 years. In Europe, Aurangzeb was seen as the embodiment of power and wealth, thanks to his monopoly over the diamond trade. And that was what made the *Grand Mogul's Throne* so fascinating to Augustus the Strong.

The *Grand Mogul* himself can be seen at the center of the composition, enthroned on velvet cushions and sitting in the lotus position. Behind him is a golden sun with a lion at the center, symbolizing power, and, barely visible, a peacock.

Subordinates kowtow at the ruler's feet, observing an appropriately respectful distance. Fierce-looking bodyguards are stationed on either side, along with eunuchs holding fans made of peacock feathers.

The palace is hinted at, with its golden hangings and pagoda rooftops where winged dragons writhe. We can see what look like Chinese characters and Egyptian hieroglyphs. Also on the roof is a small shrine to a four-armed Indian goddess whose temple is populated with winged serpents. Flanking the throne are pyramids of the sun and the moon, packed with a wealth of detail that defies description. There





The individual parts of the scene are full of detail and wit, such as the heavily laden white elephant (above, left) and the curious monkeys rampaging around the howdah on a gray elephant (above, right); music is being played, drums are beaten (below, right); and on each side is a golden hand covered in symbolic motifs (below, left)





Left: a visiting foreign dignitary, arriving to pay his respects to the Grand Mogul, is carried in great state in a sedan chair. Nearly all of the figures are made from pure gold, covered with detailed enamel work to depict their exotic clothes. They have been lavishly adorned with real pearls, turquoise, rubies, and diamonds

are canopies, little flags, serpents, symbols representing zodiac signs, goddesses and gods, mythological stories, and universal theorems. Dinglinger could doubtless have talked for hours about his *Court at Delhi*, as the work is also known. He had studied the travel literature of his time and transformed it into a grand heathen altar that is, at the same time, an illustrated encyclopedia of its maker's understanding of the East.

In the outer circles around the throne the gifts are brought for presentation (after all, it is Aurangzeb's birthday): richly ornamented goblets, a horn of plenty with a magpie on it, a clock, two lavishly decorated dromedaries, horses, hunting hounds, and two elephants. A jeweled net lies across the forehead of the gray elephant; the heavy brocade cover on its back is ornamented with faun-like grimacing faces and gold borders. Above this is the howdah, with two monkeys and a cheetah walking around it.

The three occupants are battling with a parasol and trying to hold a parrot's perch in balance. Opposite this chaotic scene is a white elephant, symbolizing peace and carrying an empty tent with the side drawn back to reveal plush silk cushions – another symbolic image, suggesting desire.

The whole *Grand Mogul's Throne* tableau is symmetrically arranged without being exactly symmetrical. We can see two golden hands, reproductions of excavation finds, that are decorated with symbols, and an intricately painted water vase. The birthday well-wishers – the Master of Masters, the Prince of Princes, an Imperial Chancellor, and a Prince of the People – are carried on sedan chairs. All are accompanied by servants and slaves. And all are men. Indeed, it's the women who are missing from Dinglinger's court scene – the concubines, belly dancers, the harem wives. Perhaps in demonstration of the true subject of the

work, though, there is a set of scales in the foreground, not to measure the deeds of a lifetime but to ascertain the ruler's weight in gold and silver coins.

The *Grand Mogul's Throne* was one of thousands of wonders in Augustus the Strong's treasury. It was housed in Dresden Castle in a suite of eight grand baroque rooms designed by the architect of Zwinger Palace, Matthäus Daniel Pöppelmann. By the end of Augustus's reign in 1733, the rooms had opened to the public as the Green Vault museum, which has good claim to be the oldest museum in the world.

During the years of the Second World War, the treasures, including the *Grand Mogul's Throne*, were removed for safe-keeping to the great castle of Königstein. Though this saved them from the infamous bombing of Dresden, which destroyed part of the treasury as well as killing up to 25,000 people, they were looted by the Red Army as it swept through Germany at the end of the war and only returned from Russia in 1958. Today, the *Grand Mogul's Throne* has pride of place in the restored Green Vault at Dresden Castle, representing an extraordinary, fascinating, and complex survival from the late baroque. ♦

Translated by Cathy Sheriff

This decorated masterpiece is an illustrated encyclopedia of its maker's understanding of the East

Auctions

With remarkable sales results this season, including the fourth most valuable wristwatch ever sold at auction, the confidence placed in rare Patek Philippe watches is as strong as ever. Simon de Burton chooses some of the most exquisite to have recently graced the block



US\$9,570,900 | CHF8,862,000

As the world's first perpetual calendar chronograph wristwatch to have been made in series, the 34.8 mm REF. 1518 by Patek Philippe is widely regarded as an essential part of any serious watch collection – and many connoisseurs believe the exceptionally rare ones featuring a salmon dial in a rose gold case to be the ultimate expression of the model. A mere 14 such watches are known to exist, with this one

offering a royal provenance, having been consigned from the estate of Prince Tewfik Toussoun of Egypt. Little surprise, then, that it soared to four times its high estimate to become the fourth most valuable wristwatch ever sold at auction. Since purchasing the watch new in 1951, the prince had kept its original box, operating instructions, and certificate of origin. Sold at Sotheby's, New York, December 9, 2021



US\$3,875,000 | CHF3,539,000

Any REF. 2499 perpetual calendar chronograph from the sought-after first series produced during the early 1950s is a collector's dream, but this 37.8 mm yellow gold example is even more desirable than most. Not only was it in exceptional condition, having spent 60 years locked in a safe since it was first sold in 1956, it is also one of the very first REF. 2499s to feature a case made by the Geneva case-maker Ed. Wenger. Its rarity is further enhanced by the double-signed dial carrying the name of the Caracas retailer Serpico y Laino. Sold at Phillips, Geneva, November 5, 2021



US\$2,956,000 | HK\$23,050,000

This unique minute-repeating wristwatch is the only survivor of just two REF. 2419 models to have been made. Originally retailed by Cartier New York in 1950, it features a superbly crafted yellow gold 34 mm case, designed by the master case-maker Emile Vichet to ensure optimum clarity of the minute-repeating chime. Later, the original owner asked Patek Philippe to give his beloved watch a larger winding crown and minute-repeater trigger for easier operation and to blacken the hands and indexes for greater legibility. Sold at Christie's, Hong Kong, November 27, 2021



US\$685,000 | CHF625,000

The Patek Philippe REF. 1518 has gone down in horological history for being the first perpetual calendar chronograph wristwatch to be produced in series and for the beautifully balanced design of its dial. As a technical tour de force, it has long been prized by connoisseurs and high-profile owners – as was true of this 34.8 mm yellow gold example of 1952, which belonged to the noted Mexican general Eduardo Hernández Cházaro. One of fewer than 300 made between 1941 and 1954, this example was offered in excellent condition. Sold at Antiquorum, Geneva, November 6, 2021



US\$2,924,000 | CHF2,670,000

Patek Philippe's World Time models are among the finest of all multiple-time-zone watches. This 1958 yellow gold REF. 2523 is an early example of the rare two-crown model, in which the crown at three o'clock sets the hands to local time while the one at nine o'clock rotates the silvered city ring until the wearer's location settles at twelve. The entire display is then synchronized, while the two-tone 24-hour ring indicates whether it is night or day. This 35.5 mm watch is the only known yellow gold REF. 2523 to have a guilloché-gold dial center. Sold at Christie's, Geneva, November 8, 2021



US\$1,725,000 | HK\$13,450,000

This 1947 REF. 1436 split-seconds chronograph was originally owned by the celebrated Patek Philippe collector Henry Graves Jr. The existence of the Graves model, one of only 59 yellow gold REF. 1436s known, remained forgotten until the death in 2012 of his grandson Reginald H. Fullerton Jr., who had inherited the piece along with his grandfather's passion for horology. The split-seconds feature of the 33 mm watch enables the elapsed times of multiple events to be recorded simultaneously. Sold at Christie's, Hong Kong, November 27, 2021



US\$2,282,000 | HK\$17,795,000

The chance to buy this REF. 3448/100 perpetual calendar wristwatch could well be described as a once-in-a-lifetime opportunity, not least because it is believed to be the only example of the model made in this configuration. The watch started life in 1974 with a 37.5 mm white gold case and a dial highlighted with indexes set with 11 brilliant-cut sapphires. The Patek Philippe archives record that in 1997 the owner requested for the original case to be replaced in platinum with a sapphire crystal caseback, making it unique. Sold at Phillips, Hong Kong, November 26, 2021



US\$3,080,000 | CHF2,813,000

One look at this 37.8 mm REF. 2497 perpetual calendar wristwatch, first sold in 1963, reveals why the model is widely regarded as one of the most exquisite vintage designs ever to emerge from the Patek Philippe manufacture. With fewer than 200 examples produced, the reference is rare in any form, but this was among the scarcest of all, being one of only three in white gold to have appeared at auction. The Arabic and dot hour markers date the watch as being one of the first REF. 2497s produced. Sold at Phillips, Geneva, November 5, 2021



US\$441,000 | CHF406,000

The Calatrava models have long served as an introduction to Patek Philippe ownership, their combination of a low-key aesthetic and exquisite engineering often starting buyers off on a journey to discover the more complicated creations. Sometimes, however, a Calatrava is not as simple as it may appear – as is true of this 35.5 mm REF. 2526 that is one of a mere five known to feature a special-request platinum case and a fired-enamel dial. When first sold in 1955, it would have cost five times the price of a gold-cased model. Sold at Phillips, New York, December 11, 2021

Collector's guide

The dial of the 33.4 mm REF. 3979J is a classic porcelain-white color. The traditional aesthetic with bold radial Roman numerals is based on pocket watch designs from the nineteenth century

The lugs of the REF. 3979 are the same distinctive shape as those on the 1950s REF. 2524/1, from which it drew inspiration. The elegant taper and the ridge at the base of each lug demonstrate the artistry of the case-maker

A 1989 Patek Philippe brochure highlighted the achievements of the model's innovative new repeater mechanism, noting that the wearer could use the slidepiece to activate the strike and then listen, "with a certain satisfaction," to the sound of the gongs as they ring out the hours, quarter hours, and minutes

Each REF. 3979 (except the platinum models) was delivered with two interchangeable backs, one in solid metal and the other in sapphire crystal. This tradition of providing a second caseback for select complicated watches began in the late 1980s and continues to this day

The REF. 3979's blued-steel *feuille* hour and minute hands and counterpoised seconds hand are inspired by a unique REF. 2524/1. Held in the Patek Philippe Museum, that REF. 2524/1 (Inv. No. P-533) is the only example to have blued-steel hands and Roman numerals

STORY John Reardon | ILLUSTRATION Nabil Nezzar

In the realm of Patek Philippe minute repeaters, the REF. 3979J marks the dawn of the modern age. Launched in 1989 as a commemorative watch for the company's 150th anniversary – along with the now iconic Calibre 89 and the REF. 3974 – the REF. 3979 has since secured its place in the history of complicated wristwatches. The development of this model resulted in the calibre R 27, the base calibre that is used for all Patek Philippe minute repeaters today. Equipped with a 22k gold winding rotor and a repeating mechanism fitted in a tiny space, the REF. 3979's innovative calibre R 27 PS (*petite seconde*) was Patek Philippe's first automatic wrist repeater. The calibre was the first regular production repeater to use the Gyromax® balance wheel and to have a 48-hour power reserve. The ingenious minute repeater mechanism incorporated the striking on two gongs with an inertial speed governor. It was also in 1989 that Philippe Stern decided that the ideal duration of a chime to mark

12:59 was 15 to 16 seconds, to allow for the 32 strikes: 12 for the hours, 6 for the quarters, and 14 for the minutes.

The R 27 PS, including its micro-rotor and chiming gongs, can be admired through the REF. 3979's sapphire crystal caseback. Initially, models had an 18k yellow gold case made by Jean-Pierre Hagmann, while later versions by Ateliers Réunis can be identified by the maker's mark, a "28" inside a key. The porcelain-white dial features Roman numerals and a *chemin de fer* minute scale.

While Patek Philippe made repeater pocket watches from 1839 and minute-repeating wristwatches from the early twentieth century, it was not until the REF. 3979 that the archetypal modern Patek Philippe wrist repeater was born. Fewer than one hundred pieces in total were produced, from 1989 until the early 2000s, in yellow, rose, and white gold as well as platinum. The first ever REF. 3979, Movement No. 1 904 000, is on show at the Patek Philippe Museum in Geneva (Inv. No. P-746). ♦



PATEK PHILIPPE MUSEUM

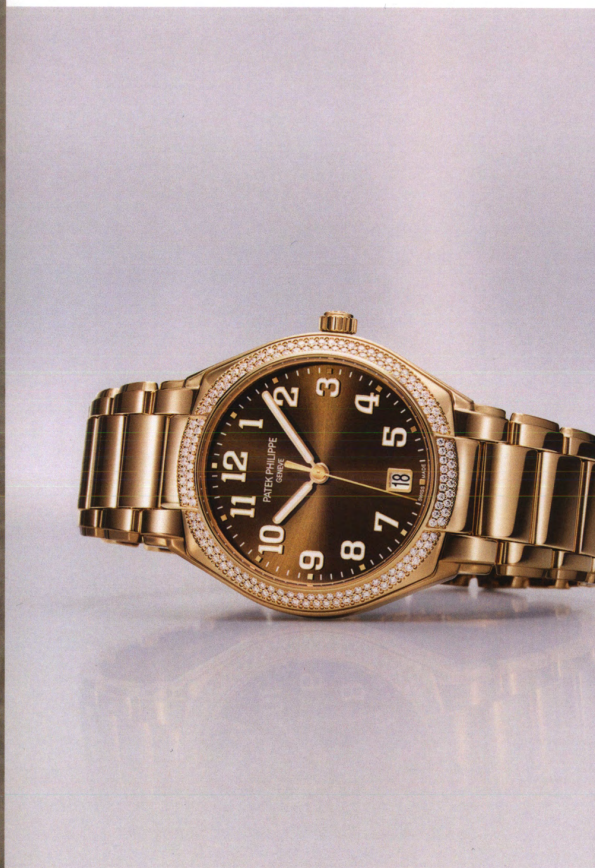


THE HISTORY OF HOROLOGY AWAITS

At the Patek Philippe Museum in Geneva, our honorary president, Philippe Stern, has curated his very own walking tour, highlighting his favorite exhibits. A special audiovisual guide, accessed through a tablet, accompanies visitors on this new route, which offers a unique insight into the history of antique timekeepers as well as those in the company's own impressive canon. There are a further four fascinating audiovisual tours to select from – each available in English, French, and German – or visitors can devise their own itinerary. Which option will you choose? Find out more at patekmuseum.com



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