Gems & Jewellery

Autumn 2024 / Volume 33 / No. 3

BRAZILIAN CREOLE JEWELLERY

BLACK IN JEWELRY COALITION

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Gems&Jewellery
AUTUMN 2024

COVER PICTURE

The Rock Hound's HotRocks Alchemy Cluster Ring, using 18K Fairmined gold vermeil, was created with the lost-wax casting process to replicate a naturally occurring quartz wand. Photo by Circe Hamilton, courtesy of The Rock Hound.

JOIAS DE CRIOULA

Antiquarian and author Itamar Musse shares new images and insights on these unique Afro-Brazilian jewels with Christine Puleo Reis.

ANCIENT EGYPTIAN FUNERARY AMULETS

Exploring the use and importance of blue gem materials in burial amulets in ancient Egypt.

CASTRO NYC RETROSPECTIVE

A preview of *Futurespective*, the upcoming exhibition of the work of Terry Castro's work, opening in London in October 2024.

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Gems&Jewellery

Autumn 2024 Edition Featured Contributors

1. JOSEPH DENABURG

A fourth-generation jeweller, Joseph Denaburg is the marketing director and digital strategist at Levy's Fine Jewelry (Birmingham, Alabama), where he has worked since 2013. With a deep expertise in digital marketing and a passion for jewellery and fashion history, Mr Denaburg handles marketing, public relations and social media for the renowned jeweller. He also serves as vice president and treasurer of the Alabama Jewelers Association. Prior to joining Levy's, Mr Denaburg was a partner at Alabama SEO, where he helped businesses grow through a wide range of digital marketing services.

2. SANDRINE MARTIN

Sandrine Martin is a Graduate Gemologist (GG) enriched with 20+ years of multifaceted international experience working in various consulting and managerial positions, She has a strong orientation on jewellery creation, sales and marketing of fine gems and high-end jewellery, as well as business development and professional coaching. Her passion for gems, enhanced by her fascination for cultural diversities, led her to travel, live and work on all five continents. Driven by a desire to educate, share, and transmit her knowledge, Ms Martin loves writing and developing content on the history of gems and jewellery, including articles, training programmes and courses. A corporate trainer and creator of Inner Gem Coaching, her mission is to support, guide and encourage her clients to shine their brightest light.

3. CHRISTINE PULEO REIS

Christine Puleo Reis is a New Yorker currently living in Rio de Janeiro, Brazil. Her career has always focused on Latin America, following studies in anthropology at Dartmouth College and journalism at Columbia University in New York. She holds an AJP and a Graduate Diamonds diploma from GIA. Prior to moving to Brazil, she worked with Kentshire Galleries, the antique jewellery shop located at the top of Bergdorf Goodman in New York City. She enjoys writing about the diversity of Brazil's gem production and unique jewellery styles and periods, such as Brazilian Creole and Brazilian modernist jewellery, and is currently coordinating several Brazil-U.S. gem and jewellery projects.

4. ADRIANNE SANOGO

Adrianne Sanogo is a gemmologist who earned her GG and Graduate Pearl (GP) diplomas from the Gemological Institute of America (GIA). She also participates in GIA's Continuing Education Recognition Program. She is an associate professor and the associate dean for academic programs and student services in the College of Education and Human Sciences at Oklahoma State University. Her research interests include connecting students to STEM, increasing interest

in STEM careers, and integrating digital technologies into teaching and learning. Ms Sanogo is a contributor to *Rapaport Magazine* and the chair of education for the Black in Jewelry Coalition. She also teaches courses and workshops, including Christie's History of Jewellery Design and GIA's Jewelry Forensics Seminar.

5. SUSI SMITHER

Susi Smither founded The Rock Hound in 2015. She has dedicated herself to the craft of designing and creating jewellery that is transparent and ethically and responsibly sourced. Her designs show the intersection of her interest in science and her obsession with colour. The Rock Hound's award-winning work has been featured on the pages of *Vogue*, *Professional Jeweller*, and other publications. Ms Smither earned her FGA from Gem-A in 2011; she also holds a JDT from GIA and a BSc in maths and management from Kings College London.

6. ROBERT WELDON

Robert Weldon is one of the world's most renowned gem photographers; his photographs and articles have been featured in numerous gemmological, jewellery and consumer publications. Since receiving his GG in 1987, Mr Weldon has worked at *JCK Magazine* as coloured gemstone editor, *Professional Jeweler* as senior writer and at GIA in Carlsbad, California in several positions. He retired from GIA in 2024 as the director of the Richard T. Liddicoat Gemological Library and Information Center. Mr Weldon is also the 2020 recipient of the Accredited Gemologists Association's (AGA) Antonio C. Bonanno Award for Excellence in Gemology.

7. KAREN WESTLAND

Dr Karen Westland has a portfolio career encompassing an Innovation Theory lecturing role at The Glasgow School of Art and their silverware and jewellery business. They are a director for the Association for Contemporary Jewellery, a team member of Fair Luxury and a Fairmined licensee. Dr Westland was formerly the programme manager for Ethical Making with The Scottish Goldsmiths Trust. These various activities enable Dr Westland to advocate for Scottish designer makers and craft practices that innovate toward a just transition in the extractive and jewellery industry.

Gem-A News

A round-up of the latest industry news from Gem-A

TWO 1000+ CARAT GEMS UNEARTHED BY LUCARA DIAMOND

This summer, the Karowe mine in Botswana yielded two rough diamonds weighing over 1000 ct, including the one of the largest gem-grade diamonds ever mined. The finds align with the underground expansion project of the mine's owner, Canadian exploration and mining company Lucara Diamond, which aims to extend the life of the mine beyond 2040.

On 21 August, Lucara announced the discovery of a 2,492 ct rough diamond, thought to be the second-largest gem-quality diamond ever mined (exceeded only by the Cullinan diamond). The gem was discovered and removed via the company's Mega Diamond Recovery ("MDR") X-ray Transmission ("XRT") technology, which was introduced in 2017 to identify and preserve large, high-value diamonds. The stone was recovered from the processing of EM/PK(S) kimberlite, the dominant ore type that Lucara is targeting during the first years of underground mining operations. Lucara announced the unearthing of a 1,094 ct diamond on 15 September, which was produced from the EM/PK(S) ore type in the South Lobe of the Karowe mine. This specimen is the sixth stone in excess of 1,000 carats to be discovered by Lucara.

The Karowe mine is 500 km north of Botswana's capital city of Gabarone. It has been in operation since 2012 and is 100% owned by Lucara Diamond. The Mining License for Karowe has been approved by the Botswana Government until 2046.

The two rough diamonds produced from Botswana's Karowe mine by Lucara Diamond in 2024. The 2,492 ct diamond (top), found by XRT technology, was announced in August, while the 1,094 ct gem (bottom) was revealed the following month. Photos courtesy of Lucara Diamond.

A diamond necklace formerly owned by the Marquess of Anglesey, with possible connections to Marie Antoinette, is up for auction at Sotheby's on 11 November. Photo courtesy of Sotheby's.

SOTHEBY'S TO AUCTION NECKLACE WITH POSSIBLE CONNECTION TO MARIE ANTOINETTE

An eighteenth-century diamond necklace will be available on 11 November by Sotheby's Geneva, as part of their 'Royal & Noble Jewels' auction. The necklace was designed as a pair of old cushion-shaped diamond tassels connected by three rows of collet-set, old cushion-shaped and circular-cut diamonds (approximately 280–300 carats in total). While the piece was formerly owned by the Marquess of Anglesey, a number of sources — including the diaries of late politician Henry 'Chips' Channon — link some of the diamonds used in the jewel to a scandal involving Marie Antoinette referred to as "The Affair of the Diamond Necklace". Other sources, such as *Joyaux du Trésor de Russia* (Gorewa et al., 1990), point to the Russian crown jewels as the source of the cordelières jewel.

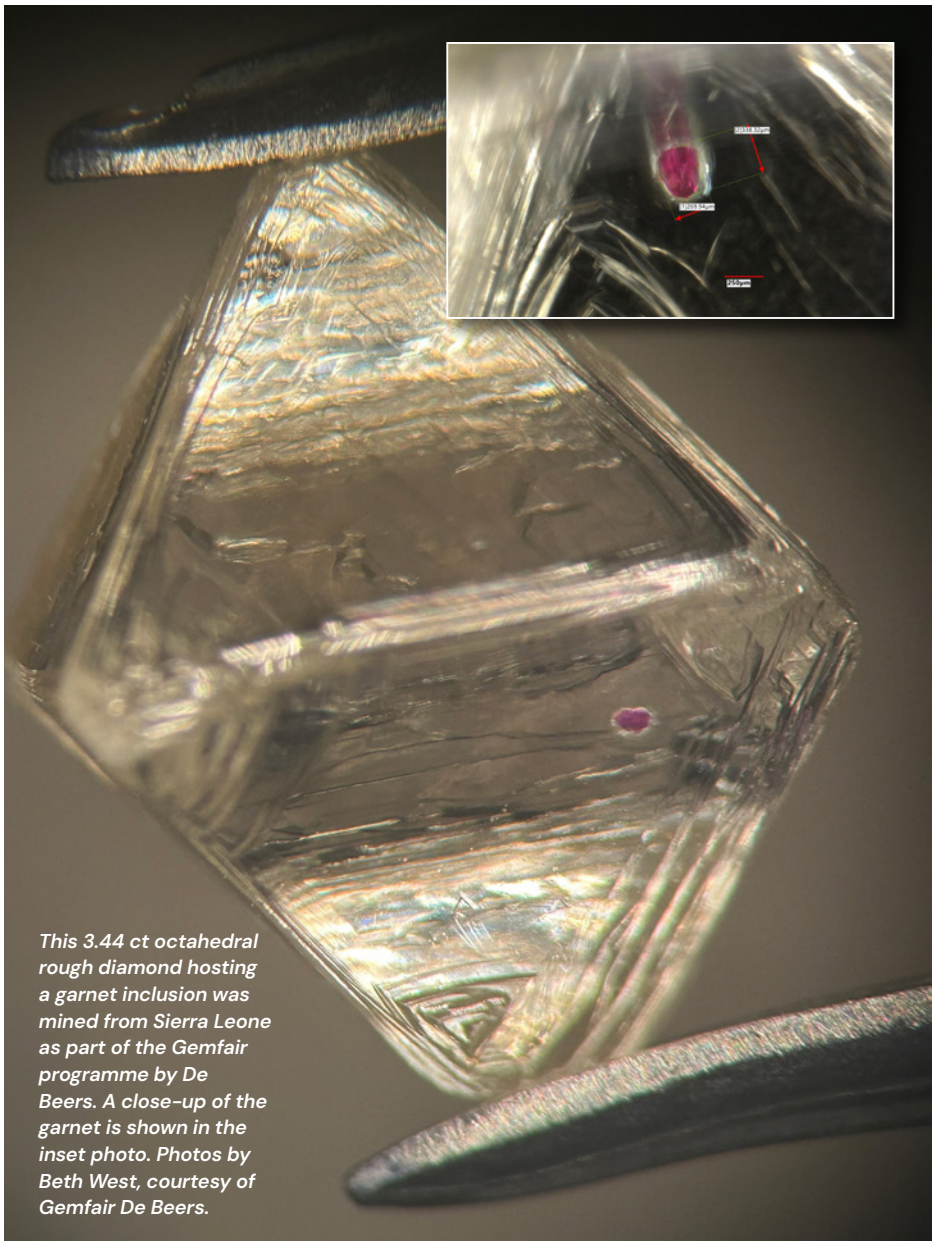
The necklace, which was exhibited in 1959 in London and 1979 at New York City's American Museum of Natural History, will tour Sotheby's locations in Hong Kong, New York, Singapore, Taipei and Dubai before arriving in Geneva for the sale. It is expected to fetch 1,600,000 - 2,200,000 CHF (£1,420,320–1,952,940) at auction.

CONFERENCE 2023 HIGHLY COMMENDED BY INDUSTRY ORGANISATION

Gem-A's Conference 2023 was Highly Commended in the 'Best Event' category at the Memcom Excellence Awards, held 26 September in London.

Memcom connects senior leaders from membership organisations, trade associations and the not-for-profit sector in order to foster collaborative innovation and knowledge sharing while also creating change in society. Their awards are open to all not-for-profit membership organisations.

DIAMOND WITH GARNET INCLUSION FOUND IN GEMFAIR PRODUCTION



This 3.44 ct octahedral rough diamond hosting a garnet inclusion was mined from Sierra Leone as part of the Gemfair programme by De Beers. A close-up of the garnet is shown in the inset photo. Photos by Beth West, courtesy of Gemfair De Beers.

Whilst sorting recent production for Gemfair, a De Beers programme designed to support artisanal miners in Sierra Leone, a noteworthy diamond was discovered. The rough octahedral crystal, weighing 3.44 ct, features a striking chrome-pyrope garnet inclusion, sizable enough for its rich colour to be easily visible.

Caught in the growing diamond crystal during its formation in the mantle, these mineral inclusions are not uncommon. However, its size, visibility and story make this example particularly special.

These purple-hued guest crystals indicate growth in a peridotitic host rock. Peridotite is composed predominantly of the mineral olivine and varying proportions of orthopyroxene, plus minor to trace amounts of clinopyroxene, chromite and garnet. In the case of peridotitic garnet, the high magnesium and chromium content and the generally low calcium content contribute to the distinctive purple colour.

The growth environment indicated by the garnet inclusion in this diamond is directly associated with lithospheric mantle beneath the most ancient regions of Earth's continental crust, called cratons. Subcratonic mantle has been established as the principal growth environment for most of the diamonds currently accessed. The majority of deep-origin volcanic eruptions that brought diamonds to the surface millions, or even billions, of years ago passed through these relatively exclusive pockets of our planet. The peridotitic diamond host – specifically the melt-depleted harzburgitic variety of the rock – is also associated with the oldest ages attributed to the gemstone, with dates of 3.2 billion years established through radiometric dating using inclusions such as these.

Not only does the diamond bear witness to most of Earth's history, but its impact and future legacy is also notable. Found by an artisanal miner in one of the 331 small mining operations currently supported by the Gemfair programme, the payment received for the diamond will directly benefit his family and his direct community. Artisanal diamond mining is conducted using basic methods of extracting and processing, meaning it mainly relies on simple hand tools and equipment. It also accounts for approximately twenty percent of global production, conducted within the poorest rural areas of Sub-Saharan Africa, Latin America and Asia. As such, artisanal miners rely on the vocation as a principal form of income. Due to the circumstances in which they operate, however, they have limited understanding of the material and the market, having restricted (if any) access to the formal supply chain. Such obstacles can invariably lead to issues, such as illegal trading, resulting in very little return for their valuable product.

Since its inception in 2018, initially as a pilot project but now celebrating its sixth successful year, Gemfair has worked towards not only offering mining communities in the Koidu region of Sierra Leone a direct and traceable route to the global market, but also helping these communities develop their operations and improve overall basic living conditions. Efforts range from training the miners in diamond valuation to the conversion of mining sites into fish ponds or small farms.

Beth West FGA DGA

Dr Jane Goodall in the Jane Goodall Collection pavé leaf lab diamond pendant necklace. Photo courtesy of Brilliant Earth.

DR JANE GOODALL PARTNERS WITH RETAILER BRILLIANT EARTH ON NEW JEWELLERY COLLECTION

As part of their 'Rethink Everything You Know About Diamonds' campaign, ethical jewellery retailer Brilliant Earth has launched a collection in partnership with conservationist Dr Jane Goodall. Each piece in the Jane Goodall Collection is made with recycled gold, along with the company's Capture Collection lab-grown diamonds, which are made in clean-energy facilities with carbon dioxide before it is released into the atmosphere.

Inspired by Tanzania, the collection's motif is centred on banana leaves, due to their natural beauty and role as a crucial part of daily life for a number of global communities. Ten percent of The Jane Goodall Collection proceeds will benefit the Jane Goodall Institute, funding crucial work to protect and restore critical habitats, support the health and education of women and girls, cultivate local livelihoods and mobilise the next generation of environmental leaders.

"Brilliant Earth and I are united in our mission to better the planet for future generations, and I deeply admire their steadfast commitment to ethical and sustainable practices," said Dr Goodall. "The Jane Goodall Collection pays homage to my beloved Tanzania, serving as a poignant reminder to consumers that their conscious choices in daily life can catalyse meaningful change. We all play a role and have an impact on our collective future."

WORLD'S FIRST LAB-GROWN RUBY DEVELOPED *IN SITU*

A researcher at the University of the West of England (UWE Bristol) successfully produced the world's first lab-grown ruby *in situ*, creating the sample in a platinum ring. Sofie Boons, a senior lecturer in design crafts at UWE Bristol as well as a PhD candidate, has spent the last four years working to develop such items within metal structures, using discarded gemstones or waste gemstone material. Ms Boons grew the specimen from a 'ruby seed' gathered from such relinquished matter.

Ms Boons, a former jeweller, noted that "Usually with chipped gems, jewellers have to cut them even smaller before using them, which therefore lowers the value. This process enables them to use waste gemstone material to grow gems as big as they need, *in situ* in metal structures. I hope this innovation will put an end to the long-shared narrative that lab-grown gems are less valuable than mined ones." She will publish her work next month as she concludes her PhD.

With funding from a UWE Bristol Vice Chancellor Grant, Ms Boons will continue her research, attempting the development of multiple seeds simultaneously and in other metal structures. She will also test the production of lab-grown sapphire with different colours in collaboration with the University of Bristol.

A researcher at the University of the West of England has created the first lab-grown ruby in situ. The material was developed within a platinum ring. Photo by Sophie Boons.

THANKS TO THE SPONSORS OF GEM-A CONFERENCE 2024

Our annual Conference is a source of excitement to Staff and Members alike, and we cannot wait to welcome our guest speakers and attendees for this year's event, held 2–3 November 2024. We could not provide this wonderful programme without the support of our Sponsors:

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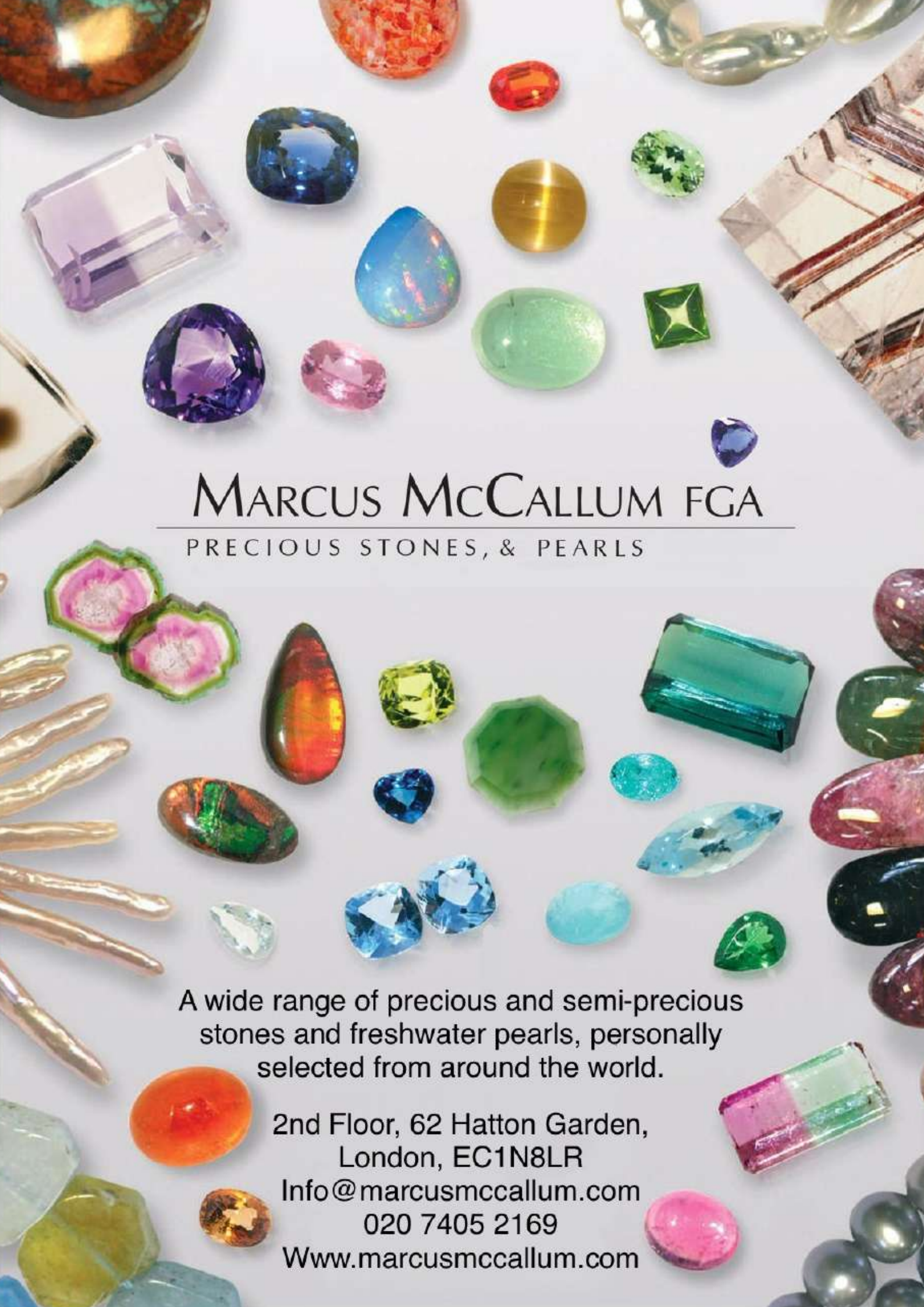
ERRATUM

In the Summer 2024 Gem-A News entry entitled "Peruvian Embassy Hosts Panel Focussing On Industry Change," Beth West FGA DGA was left off the list of panellists. We regret the error.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INSPIRATION BRINGS ARTISTS TOGETHER

Robert Weldon GG details the collaboration between gem artists that yielded a stunning jewel.

THE CREATORS' PERSPECTIVE

Jewellery designer Paula Crevoshay has long admired Glenn Lehrer's intricate, flowing gem carvings. For his part, Lehrer has drawn inspiration from Crevoshay's creative use of colour and metals. Both artists are at once lyrical and whimsical in their design, a factor that Martin Bell, Crevoshay's husband, suggested could bring them together in collaboration.

"Paula and I ran into Glenn and Sharon [Lehrer's wife] in Tucson in 2010, and I asked him what he did with his many award-winning carvings. I suggested they would have a wider audience and be more attractive to museums if they were mounted in jewellery," Bell explained. "I suggested that he and Paula should create an assemblage of their very best work to create a legacy collection to represent our era: a genesis of new ways to carve and facet gemstones."

Together, Crevoshay and Lehrer did just that: They completed eleven of what was intended to be a twelve-piece collection, named the Synergy and Symbiosis Collection. "In time, a final jewel may be made," Crevoshay says.

"The collection was on display at the Alfie Norville Museum, in Tucson, Arizona, for the last two years. It will be on exhibition at the Lizzadro Museum of Lapidary Art in Chicago, Illinois, for a six-month engagement, starting in November," Bell says.

Regarding *Dancing Jingu*, the jewel shown here, Paula Crevoshay says: "I love how Glenn can take solid stone and create the illusion of movement, the suggestion of flow. When I first saw this wonderfully beautiful carving of dendritic agate from Montana, I was delighted with its attractive pattern which reminded me of the fabric of a kimono. I envisioned Jingū, the powerful Empress of Japan dancing in elated joy!" she says. [Note: Empress Jingū (169–269 CE) ruled as a regent following her husband's death in 200 CE].

THE PHOTOGRAPHER'S PERSPECTIVE

It is hard not to fall in love with some of the pieces I capture. However, the photographer has a job at hand: to represent the artists with elegance, and to do in a way that portrays the gemstones and metals as accurately as possible. That involves studying the piece, sometimes conferring with its designer, visualising its transparent and translucent gems and making sure that they perform next to the gold… both high polish and matte surfaces.

Glenn's carving had delicate lines resembling a flowing cloth, as Paula eloquently describes. Set against a light background, the dendritic patterns were much more apparent. However, set against a dark background, 'Jingū' offered much more drama. Photography sometimes is about compromises. I chose a dark background and made sure to backlight the jewel enough to be able to see dendrites. ■

In Dancing Jingū, *the legendary Empress of Japan is dressed in her regal splendour and expressing glee. This charming tour-de-force by Paula Crevoshay, measuring 151 x 65 mm, features a custom-carved 128.84 ct agate by Glenn Lehrer. The jewel also uses 0.80 tcw tsavorite garnet; 9.53 tcw black spinel; 0.33 tcw red spinel; 1.94 tcw diamond; 1.73 tcw brown diamond; and a 3.39 ct black diamond. Photo by Robert and Orasa Weldon.*

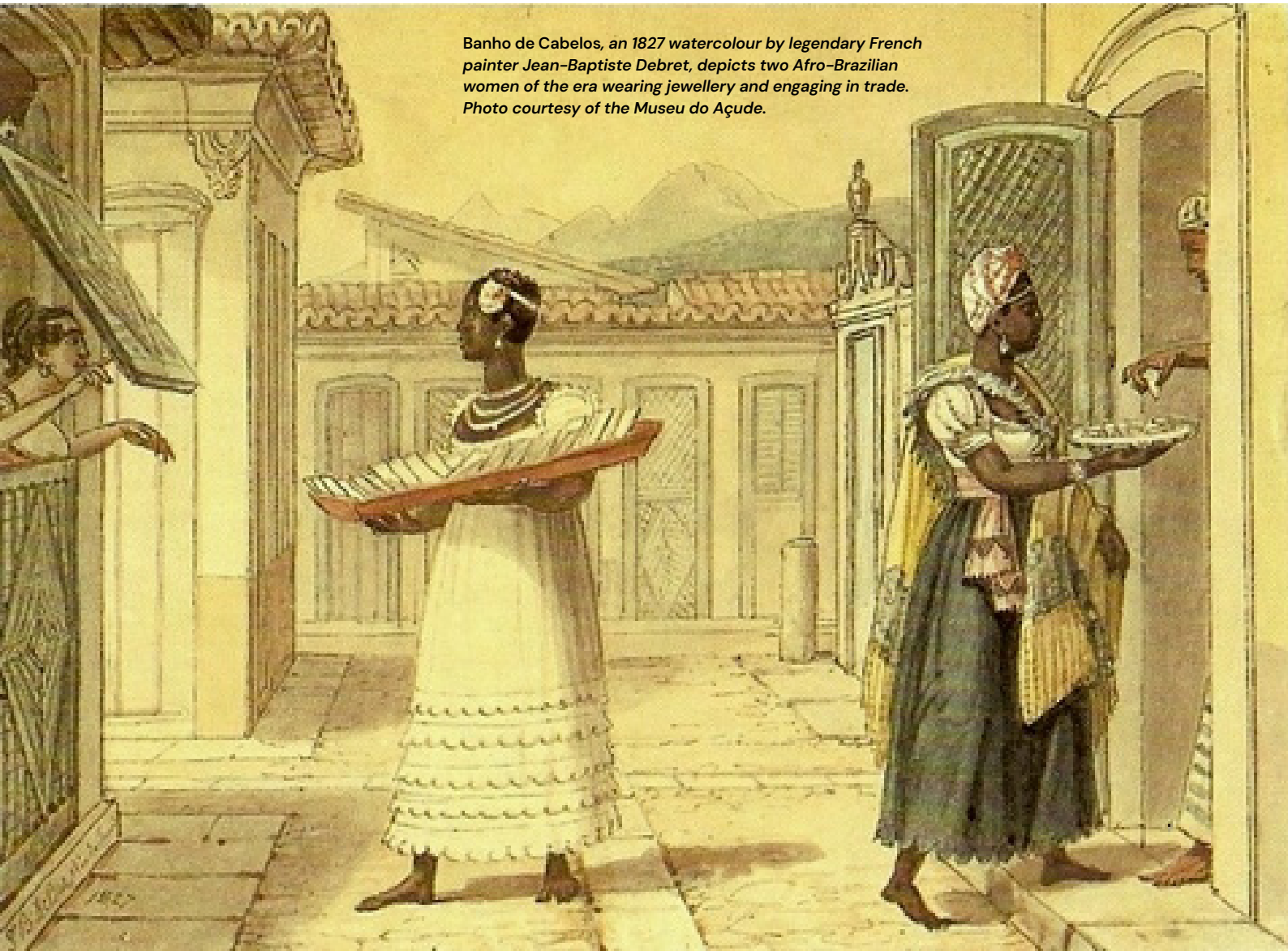
JOIAS DE CRIOULA

Unveiling the History of Brazilian Creole Jewellery

Brazilian antiquarian and author Itamar Musse shares new images and insights on these historical jewels with Christine Puleo Reis.

Brazil is celebrated for its unparalleled array of dazzling gemstones, including the coveted Paraíba tourmaline, exquisite Piauí opals and Imperial topaz. However, a lesser-known but equally captivating facet of Brazil's jewellery heritage is the style that emerged in the country during the eighteenth and nineteenth centuries. This distinctive jewellery, known as *joias de crioula* or Brazilian Creole jewels, is often regarded as the only truly Brazilian jewellery style, characterised by forms and functions found nowhere else in the world. These jewels were worn by enslaved and formerly enslaved people and their descendants in Brazil, primarily in the state of Bahia along the northeast coast. Today, these pieces are garnering renewed attention, recognised not just as adornments, but as significant symbols of social and economic power.

Early Brazilian portraiture depicts women of the era adorned with elaborate gold jewellery: layers of long, multi-strand chains, cuff and bangle bracelets and charm bracelets. Recent research reveals that some women acquired these jewels through their own efforts, such as selling food and traditional crafts at local markets. At that time, enslaved people were permitted to keep earnings from their own commercial endeavours at local marketplaces; once freed, they had unrestricted income potential. These earnings were often invested in gold jewellery, which served as a means of displaying status, self-expression and economic autonomy.



Banho de Cabelos, *an 1827 watercolour by legendary French painter Jean-Baptiste Debret, depicts two Afro-Brazilian women of the era wearing jewellery and engaging in trade. Photo courtesy of the Museu do Açude.*

The unique style of this jewellery lies in its blend of African and Portuguese (and other European) cultural elements, merging into a single, distinctive form. The hallmark pieces feature a baroque style, with elaborate filigree combined with the bold, brutalist proportions of African jewellery. These pieces also incorporate spiritual and religious symbolism from Europe and Africa alongside indigenous references to the natural world.

Scholarship on these jewels is expanding. Previously, it was thought that these pieces were merely gifts from enslaved people from their owners. However, as with much of history, the reality is more nuanced. Unlike most of the region, Brazil had an abundant supply of gold rather than silver, and there was no established legacy of metal jewellery making. Indigenous jewellery in Brazil typically used more ephemeral materials like seeds and leaves. This created a unique opportunity for the emergence of *joias de crioula*, representing a distinctive form of self-expression on Brazilian soil.

Itamar Musse, a prominent collector and dealer based in Salvador, Bahia State, is preparing to release an ambitious work that will further illuminate the significance of *joias de crioula*. This two-volume collection, spanning over 800 pages, features several essays from notable figures in Brazilian art and culture. Among the artists featured is Vik Muniz, who contributes the book's cover art. The centrepiece of the work is an impressive collection of more than sixty pieces owned by a single woman.

A classic of the* joais de crioula*, an 18K gold bead necklace with filigree detail, with detachable rosettes with a paste centre. Additional imagery includes the Espiritu Santo, a common symbol in Brazil representing the Holy Spirit, in addition to a cross. The two-pendant piece is designed to be worn on the neck and back.

> The hallmark pieces feature a baroque style, with elaborate filigree combined with the bold, brutalist proportions of African jewellery.

"Knowledge about these pieces is still somewhat limited," Musse noted. "Historically, it was believed that these jewels were given by owners to slaves as symbols of power and status. However, our research reveals a story of female resilience. We can trace the history of one Afro-Brazilian woman with a collection of 60 to 70 pieces. Through her objects, documents and photos, she narrates her time."

Musse explained that these women were integral to the workforce during the booming economy of the 1700s and 1800s. The development and evolution of this jewellery style were closely tied to the era's economic growth. "These women were dealers and traders, highly successful and resilient, with significant purchasing power," he observed. Yet, *joias de crioula* were more than symbols of prestige and beauty; they also carried deep spiritual significance to the wearer.

One of the most recognisable styles was the *balangandan*, worn at the waist like a chatelaine and adorned with a collection of charms or, more accurately, talismans or amulets. These included images of local flora and fauna and African elements, with some Christian symbols. Each *balangandan* was unique, reflecting its wearer's individuality.

***A silver* balangandan*, designed to be worn around the waist. A carved* jacarandá *wood* figa *is among the many amulets adorning the piece; others include several tools and icons to appease the* orishas.**

"The jewels served as a way to carry one's wealth and also had spiritual connotations, often related to protection, prosperity, and fertility," noted Virginia Moraes, a Rio de Janeiro-based contemporary jewellery designer. Ms Moraes is also an educator and an independent scholar with a fascination for *joias de crioula*. "These pieces were believed to possess magical powers, establishing a unique dialogue between the owner and divine forces. They were not mere ornaments; they were genuine talismans, possibly the most significant in Brazilian history." Ms Moraes explained that religious syncretism between African religions and Christianity was reflected in the amulets, combining African symbols like teeth, horns and coins with Christian symbols such as crucifixes and saint medals. What makes these pieces distinctive is that this merging of Afro-Brazilian imagery with Portuguese Catholic icons represents a form of religious reconciliation not found elsewhere.

What makes these pieces distinctive is that this merging of Afro-Brazilian imagery with Portuguese Catholic icons represents a form of religious reconciliation not found elsewhere.

Another striking aspect of these jewels is the diverse range of materials and imagery – swords, tridents, hatchets, arrows, canes and keys, as well as *figa* fists (which served as a symbol of protection), nuts, pomegranates, cashew fruits and palm leaves. Many of these items might be easily mistaken for everyday objects or native vegetation, but in fact there was deep meaning behind these items, usually related to African religions that were brought to European colonies from West Africa. In particular, many of the utilitarian objects were tools of divine spirits, known as *orishas*, and were considered sacred objects used in ceremonies to connect with and honour the gods. Women used the *orishas* as protection against misfortune and evil.

Though the use of these jewels was once widespread, with the passage of time such pieces are harder to find. →

A model displays several pieces from the book and upcoming exhibit in Salvador, Brazil, including two impressive 18K plaque bracelets.

This nineteenth-century silver balangandan was auctioned by Sotheby's in 2019. The piece includes twenty-six silver charms, two of which are made of mammalian teeth. Photo courtesy of Sotheby's.

Today, they are highly sought after in Brazil by collectors, historians, jewellers and enthusiasts. *Joias de crioula* are seen not as mere (and passive) adornment, but as potent symbols and a rich reminder of a particular location and time in history. The forthcoming book by Mr Musse, titled *Florindas*, features hundreds of photographs, and promises to offer readers an in-depth look into the complex world of *joias de crioula*. Slated for release in November 2024, the book launch will coincide with an exhibition at the Banco do Brasil Cultural Center in Salvador, Bahia.

A model wears several layers of pieces at once, typical of the style of the crioula, including three fine examples of filigree and coral bracelets.

> *Joias de crioula* are seen not as mere (and passive) adornment, but as potent symbols and a rich reminder of a particular location and time in history.

Joias de crioula are tangible examples of a time when this population of Afro-Brazilian women were enjoying burgeoning independence, and indulged in the jewels as their acquisitive power grew, using the jewels not only to adorn themselves but to protect themselves and their fortunes. In fact, many specialists today consider the use of such jewels as direct evidence that Afro-Brazilian women of the era were much more integrated and integral in Brazilian society and economy than previously believed. ■

All photos courtesy of Itamar Musse unless otherwise indicated.

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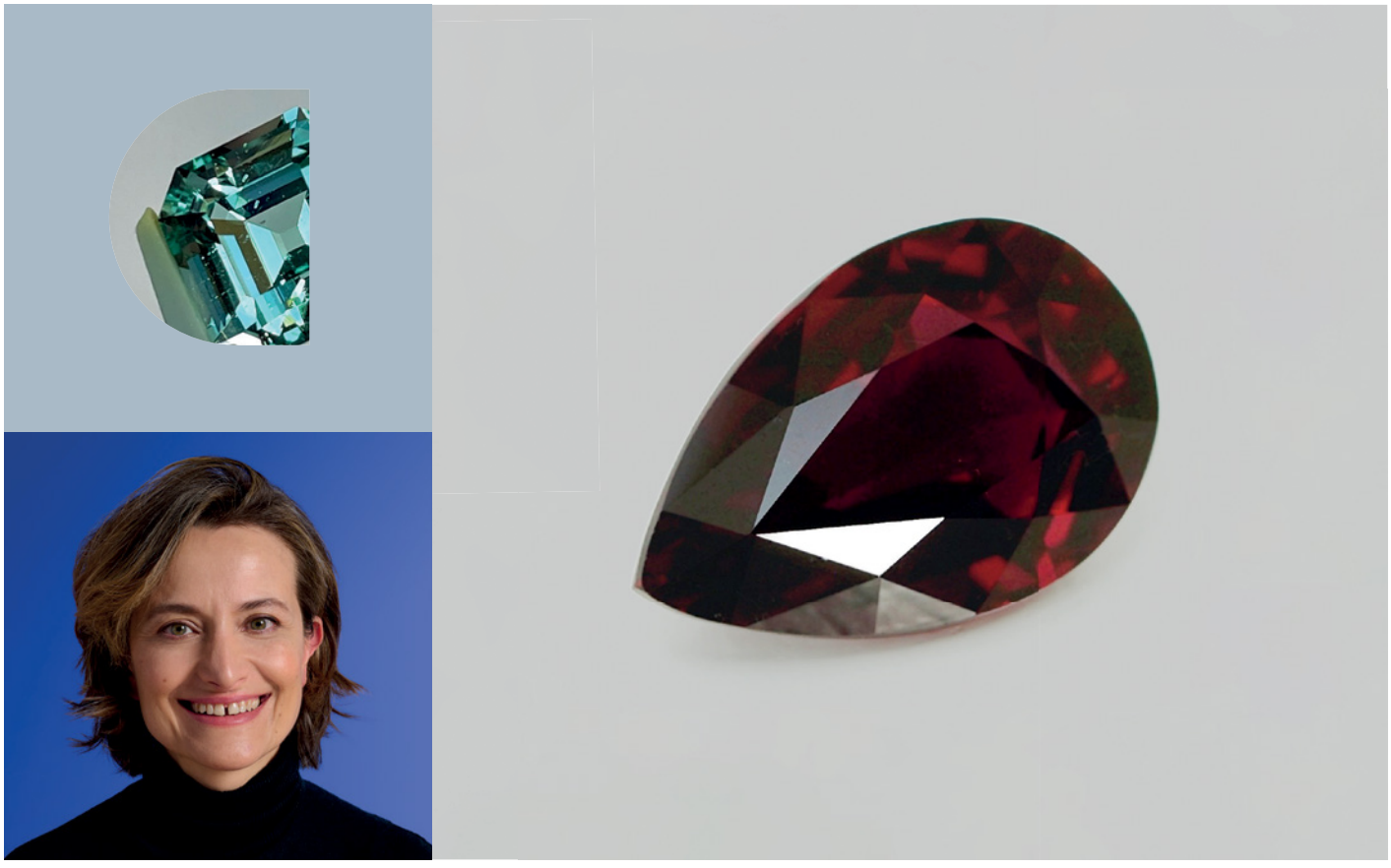

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Creating Community and Connection with the BLACK IN JEWELRY COALITION

Adrianne Sanogo GG reviews the work of the nonprofit organisation for Black gem, jewellery and watch trade members.

Amid the racial reckoning in the United States in the summer of 2020, in the aftermath of the murder of George Floyd, a group of jewellery professionals took proactive measures to confront systemic racism and enhance diversity and inclusion. Although research consistently emphasises the advantages of diversity in business, this group found a shared sense of isolation in their respective roles within the industry, often being the only Black professionals in their workplaces. Through a series of Zoom discussions, eight Black industry members – who, for the most part, were initially strangers – recognised an opportunity to create a supportive community in a traditionally exclusive environment, while promoting inclusivity among Black jewellery professionals, between like-minded organisations and within the industry beyond discussions solely focused on race. As a result, the Black in Jewelry Coalition (BIJC) was launched.

BIJC strives to support the progression of Black professionals within our industry by fostering connections, providing education and offering resources. Their mission involves driving change by consolidating resources, forming alliances and fostering development and prospects. Their strategies include providing support tools and educational opportunities such as scholarships, grants and panel talks, as well as webinars. They also focus on granting access to venues and experiences, promoting diversity and increasing visibility. In four short years, this collaborative effort has since transformed into a prominent global nonprofit membership organisation. With representation on both the Board of Directors and Board of Advisors from every segment of the jewellery industry, BIJC is committed to advocating for the engagement, inclusion and progression of Black professionals in the gem, jewellery and watch sector.

Annie Doresca, the inaugural president of BIJC and the chief financial officer of Jewelers of America, guided the original group through rapid growth, making a significant impact on the industry within the organisation's first three years. The board members, balanced full-time jobs while conducting weekly – and often more frequent – meetings to develop programmes, grants, scholarships and opportunities to enrich not only their members, but the industry at large. Doresca's term concluded at the end of 2023, and Malyia McNaughton GG, founder of Made By Malyia, assumed the leadership position at the start of 2024. Tasked with preserving and solidifying the organisation's expansion, McNaughton's tenure began with adding three new board members, broadening BIJC's scope and unveiling new markets for membership, access and opportunities.

Members of the Black in Jewelry Coalition with Jennifer Markas (third from left), head of industry relations, Jewelers Mutual Group. From left: Nellie Barnett, Elyssa Jenkins- Pérez, Ms Markas, Lisa Jones, Annie Doresca, Malyia McNaughton and Lissette Folks. Photo by Neriah McBain.

PROGRAMMES FOR JEWELLERY DESIGNERS

BIJC strives to provide business education and scholarships while simplifying access to capital funding for their designer members. Additionally, they create connections with trusted distributors, manufacturers, miners and gem dealers.

Together by Design. A two-part competition, Together by Design highlights Black love and exceptional craftsmanship. In its second year, this contest was created to showcase the Black community, an often-neglected segment of the jewellery industry. It has a dedicated planning committee and a panel of judges

Malyia McNaughton holding designs in sterling silver created by students at the Brooklyn Steam Center FJA.

responsible for selecting the couple and the winning jewellery designer.

During the first phase of the competition, an individual or a couple can share their love story to enter for a chance to win a custom engagement ring. This opportunity is open to couples living in the United States who are not engaged or married. After the winning love story is chosen, the next phase of the Together by Design competition begins. Jewellery designers provide the concept for a ring based on the couple's story and specifications. The chosen design is created and given to the winning couple. In 2023, Michael Hogan won the design phase of the competition. His ring was created with a 1.440 ct Fancy Yellow diamond donated by Nungu Diamonds, surrounded by 0.900 tcw diamonds and 0.100 tcw sapphires and set in platinum donated by Platinum Guild USA.

Rock the Jewels Awards Ceremony and Fundraiser. In 2023, BIJC hosted a lively, sold-out gathering during New York Jewelry Week that brought together a mix of new talents and experienced professionals. More than 250 guests enjoyed the festivities, thanks to the support of twenty-five industry sponsors. The evening was highlighted by the inaugural BIJC Rock The Jewels Awards, recognising outstanding individuals in categories such as Behind the Shine, Shining Together Individual and Shining Together Group, Rising Star and Lifetime Achievement Award.

Emerging Jewelers Accelerator Program (EJAP). During 2024, BIJC and Jewelers of America (JA) collaborated to create the Emerging Jewelers Accelerator Program (EJAP). This initiative consists of an eight-month curriculum of interactive workshops for five budding retail jewellery entrepreneurs. These courses, run by a diverse range of seasoned subject-matter experts, provide attendees with the knowledge needed to establish and sustain a thriving business within the jewellery sector. The JCK Industry Fund sponsored this programme in 2024.

TRADE SHOWS

As part of its aims, BIJC has made strides in enhancing representation. The group has extended invitations to Black jewellery designers to exhibit their collections at the world-renowned JCK Vegas trade show. A significant milestone was achieved during JCK's 30th anniversary show in 2022 when, with the backing of a JCK industry grant, BIJC and JCK collaborated to introduce six emerging Black designers at the inaugural BIJC Collective booth. In 2023, four designers were in the spotlight at the booth, and in 2024 three designers presented, with one designer in the Luxury Exhibition. Several BIJC members who showcased →

GRANTS AND SCHOLARSHIP OPPORTUNITIES OFFERED BY BIJC

Opportunities	Partners (If Applicable)
Lonia Tate Memorial Scholarship for GIA Distance Education	Ben Bridge Jewelers
Brilliant Minds Tech Scholarship	Jewelers Mutual and Women's Jewelry Association

Members of the Black in Jewelry Coalition at JCK Las Vegas 2022. From left: Christian Bolling, Sasha V, Natacha Metayer and Trish Carruth. Photo by Adrianne Sanogo.

their work at the JCK show have successfully launched collections in various retail stores, including Claire's, Banter, 1st Dibs and Zales. Other trade show attendance made possible by industry partnerships include American Gem Society's (AGS) Conclave since 2021; Conversations in Park City, sponsored by Jewelers Mutual, in 2022; and Chicago Responsible Jewelry Conference since 2023.

EDUCATION

Webinars with Impact. In 2021, the BIJC and the U.S. Agency for International Development's USAID's Zahabu Safi (Clean Gold) Project collaborated to host a virtual fireside chat named "Sister to Sister: Creating Connections to Advocate for Responsible Sourcing of Artisanal Gold from Africa." This digital gathering facilitated engaging discussions among panellists and attendees, enabling them to share experiences from their respective ventures and discuss effective approaches for attaining success. Attendees of the webinar were able to delve into the topic of responsibly sourcing artisanal gold from the Democratic Republic of Congo (DRC).

The session was led by Lotanna Amina Egwatu, the creative director and principal at Mina Stones and a member of the BIJC Board of Advisors, along with Patricia Mweene, founder and creative director of INONGE ZITA Jewellery, who is also a gemstone value chain specialist. Panellists featured Dr Njanju Namazuba Zouzou, president of the Mineral Cooperative of Ukingo (Luhihi, South Kivu, DRC); Huguette Kaleba Ngoie Kasongo, co-founder of SOGECOMI, a social enterprise aiming to enhance the lives and welfare of mining communities in DRC through ethical mineral sourcing and exportation; and Ella Mindja, Zahabu Safi project officer and community liaison.

I.D.E.A. In 2022, BIJC introduced its webinar training initiative, called "Inclusion, Diversity, and Equity for All" (I.D.E.A.). This online educational course consisted of two parts, and was designed to assist individuals in recognising and addressing ingrained cultural biases that can have a profound effect on communities and workplace cohesion. The training also included anti-discrimination training for on-site employees and executives. The programme received sponsorship from various industry organisations, including the American Gem Society, Buyers Intelligence Group, Ethical Metalsmiths, Jewelers Board of Trade, Jewelers of America, Jewelers Vigilance Committee, Manufacturing Jewelers & Suppliers of America, Responsible Jewellery Council and the Women's Jewelry Association.

> The group has extended invitations to Black jewellery designers to exhibit their collections at the world-renowned JCK Vegas trade show.

Diversity and inclusion specialist Risha Grant hosted the initial session, "Eliminate the BS." Ms Grant emphasised the significance of acknowledging personal biases, addressing them and acting as an ally. Reggie Johnson, chief diversity officer/senior vice president at Signet Jewelers and BIJC board member, led the second session, entitled "Encounters with Bias and Racism." Panellists were Kecia Caffie, president of Banter by Piercing Pagoda at Signet; Karen Smith, metal artist and founder of We Wield the Hammer; Jeffery Bolling, BIJC board member; and Malyia McNaughton, designer and CEO of Made by Malyia Jewelry. They shared sharing first-hand accounts of times they have been the victims of biased and racist behaviour, as both retail employees and retail customers, and how each encounter could have been avoided. Attendees of both sessions, which were free for participants, received certificates of completion.

Advocacy. Within the retail sector, BIJC advocates for showcasing jewellery

Jewellery benches donated from precision tool dealer Gesswein at the Baldwin High School @ Shubert FJA. Photo by Patrick Crea.

LEADERS OF BIJC AS OF AUTUMN 2024

Name and Affiliation	Role in BIJC
Malyia McNaughton, GG Made by Malyia	Co-founder and Chairwoman
Elyssa Jenkins-Pérez Responsible Jewelry Council	Co-founder and Vice-President
Annie Doresca Jewelers of America	Co-founder and Founding President Treasurer
Lisa Jones GIA	Co-founder and Secretary
Adrianne Sanogo, GG University of Pennsylvania	Co-founder and Education Chair
Nellie Barnett GIA	Co-founder and Communications Chair
Lissette Scott Jam & Rico	Co-founder and Board Member
Miya Owens Amazon	Co-founder and Board Member
Thomas Davis Simone I. Smith	Fundraising Chair and Board Member
Reginald Johnson Signet Jewelers	Nominations Chair and Board Member
Pat Dambe Government of Botswana	International Committee Chair and Board Member
Jeffery Bolling	Board Member

images on brown skin to promote inclusivity and attract a more diverse customer base, potentially leading to quicker sales. In every consumer market, it is crucial to visualise oneself wearing or using a product to increase the likelihood of making a purchase.

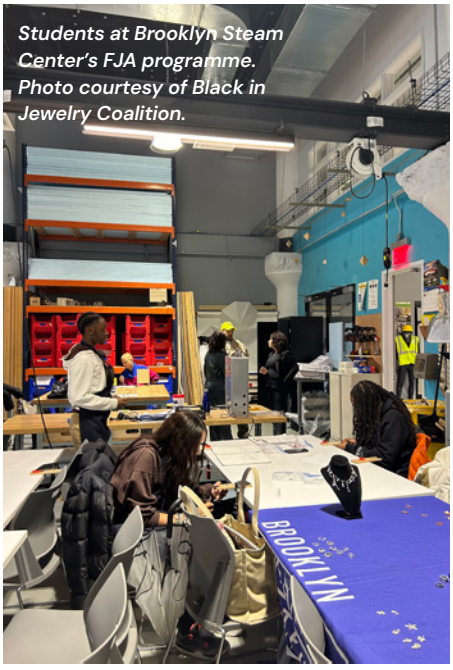
LOOKING AHEAD: THE FUTURE OF BIJC

In 2024, BIJC expanded its reach into the high-school sector by launching bench jewellery programmes under the name Future Jewelers Academy at two New York locations. The initial partnership involving BIJC, the Brooklyn Steam Center (BSC) in Brooklyn, New York, and Jewelers Mutual began in the spring of 2024.

Under the guidance of Professor Frank Fraley, an experienced jewellery designer and educator with forty years of teaching at the Fashion Institute of Technology New York (FIT), the BSC programme includes a range of topics such as bench safety, jewellery design, gem-setting, materials, laser repair, casting and moulding techniques. Graduates gain a solid understanding of jewellery craftsmanship, emphasising the artistry and precision required to create exquisite pieces. The student capstone event in June 2024 showcased their work, marking the culmination of their training. The programme is set to continue in the autumn of 2024 with ongoing support from Jewelers Mutual.

Starting in the autumn of 2024, the Natural Diamond Council (NDC) and BIJC have joined forces to launch an innovative jewellery education curriculum at Baldwin High School @ Shubert (BHS) in Baldwin, New York. This initiative, designed for high school students, presents a jewellery-making programme that highlights STE(A)M education principles in the context of jewellery creation. The primary focus is on preparing future bench jewellers and addressing the industry's workforce shortage. The programme will encompass various facets of the jewellery sector, covering benchwork, design, responsible sourcing, marketing, retail and business development. Jinbi Park, a FIT instructor, and Micha Proietto, the Jewelry CTE Teacher at BHS @Shubert, will be co-instructors of the course.

As BIJC approaches its fifth anniversary, it faces the challenge of managing rapid growth while tackling new priorities, including a shortage of bench jewellers and securing funding for emerging brands. The primary objective is to showcase to the industry that diversity and inclusion are not merely buzzwords or passing trends. They aim to illustrate that diversity and inclusion encompass more than just race; research shows they can significantly enhance business outcomes. By welcoming a broader range of voices into diverse spaces, the Black in Jewelry Coalition can create lasting benefits for everyone, which is the essence of true inclusivity.



Students at Brooklyn Steam Center's FJA programme. Photo courtesy of Black in Jewelry Coalition.

TESTIMONIALS

Members of BIJC tell *G&J* what the organisation has brought to their business practices and personal lives.

"Being involved in this organisation has allowed me to enter rooms where men and women of my colour were never invited. As a fundraiser chair, I have the opportunity to tell the story of the lack of Black men and women in the jewellery industry when seeking sponsorship."
Thomas Davis
Board of Directors Member and Fundraising Chair Simone I. Smith/Business Development

"On a whim, I changed my career to becoming a jeweller with no prior experience. BIJC captivated my life in jewellery by providing a community of supportive allies eager to help the next generation of jewellers advance. Going to Conclave was amazing. I initially felt out of place, but the warm welcome and industry immersion, from gemmology to stone sourcing, were invaluable. The sessions taught by GIA on recognising stones like rubies and emeralds through inclusions were particularly enlightening. I made lasting industry connections. The grant fuelled my passion for gemmology, solidifying my pursuit of a Graduate Gemologist (GG) degree. As I celebrate five years in business, I now work with inner-city youth to introduce them to jewellery as a career path and continue to grow JNCY Jewelers."
Natacha Metayer
GIA Graduate Diamonds, AJP Owner, JNCY Jewelers

"Being part of the Black in Jewelry Coalition has opened doors for opportunities and inclusion for me, under the leadership, mentorship and watchful eye of Adrianne Sanogo. My experience at JCK Las Vegas was eye-opening and transformative, exposing me to industry trends, networking with key players and gaining invaluable insights. The grant offered me the opportunity to showcase on the largest jewellery-show platform. Currently, I am channelling this momentum into manufacturing the men's James Mack Fall 2024 collection. This is being accomplished in Thailand as a direct result of a partnership gained during JCK Las Vegas 2023. All of this is a direct result of being a member of BIJC, which has fostered a sense of community and support within the jewellery industry."
James Mack, *GIA DD, AJP*

Jewellery from the Zales x Dorian Webb collection. From top: An open-cuff bangle bracelet with 1.125 tcw diamonds; a diamond ring (0.330 tcw) and diamond-station hoop earrings (0.8750 tcw). All pieces are made with 14K gold. Photos courtesy of Zales x Dorian Webb.

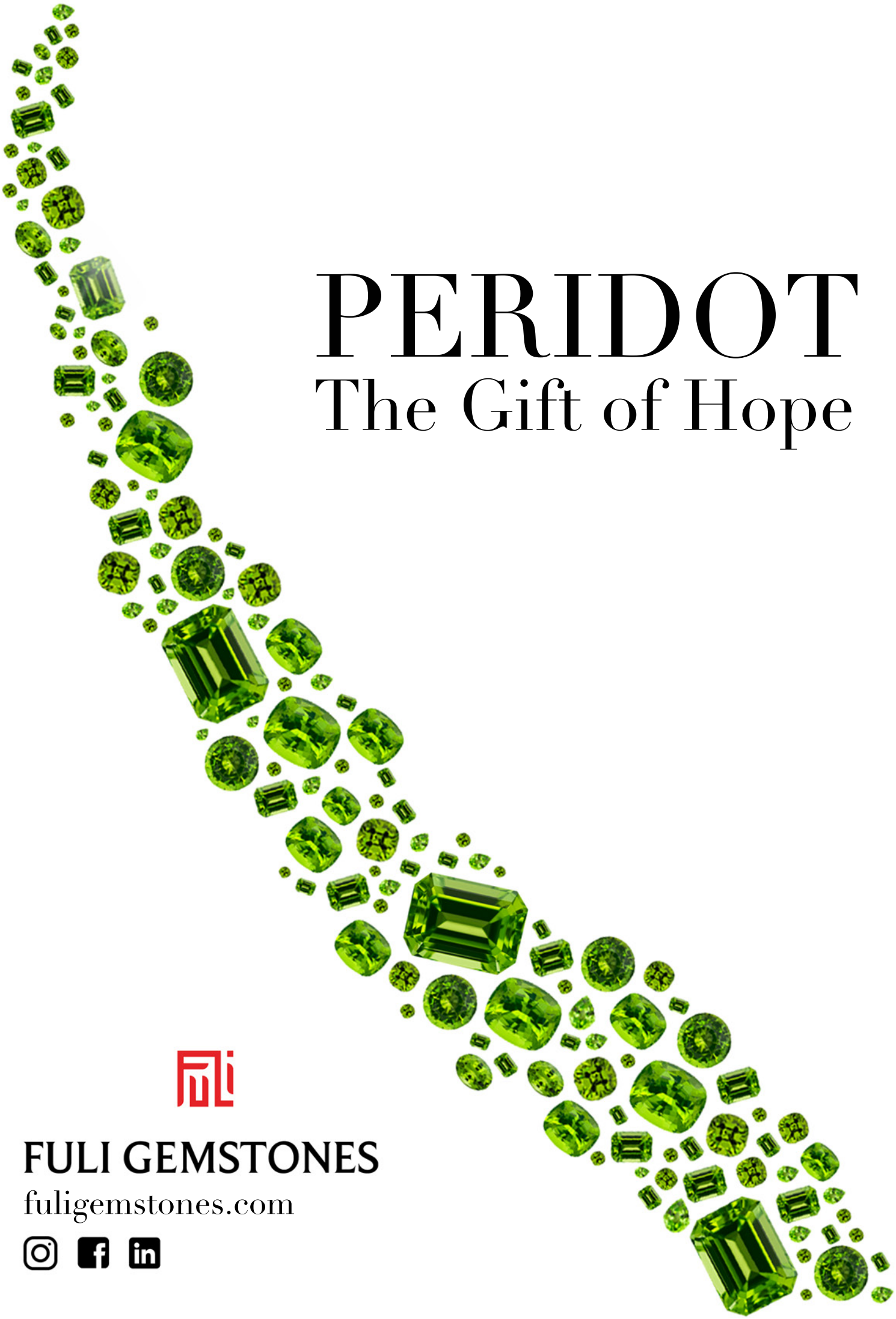
"For years, I struggled to find a sense of community within the jewellery industry, but through BIJC, I've connected with peers, attended enriching events and expanded my network. Winning the Together by Design competition was a pivotal moment — it not only affirmed my design philosophy but also propelled my business forward. The recognition brought new clients and exciting opportunities; and I was even approached to be on television. These experiences have fuelled my current project, a new customised and personalised bridal collection that debuted at JCK this year. This journey with BIJC has been a cornerstone of my growth and success in the jewellery world."
Trish Carruth
Founder and Lead Designer, Your Personal Jeweler

"Being a BIJC member opened doors for me when I was otherwise a spectator. I had travelled to JCK for four years straight to meet new vendors and walk the halls before being invited to showcase at the BIJC Design Collective. That avenue allowed me to meet new faces and take my typical online experience to real-life situations. This invaluable opportunity taught me the incredible power of community and membership and the importance of building a network on which I could truly rely. As the founder of Adore Adorn and a fine jeweller, being a BIJC member offered a validation that went beyond geographical boundaries. Even though I don't reside in NYC, where most industry events are concentrated, I feel a sense of belonging and empowerment. The BIJC connected me with like-minded individuals who share my passion, and together we celebrate the beauty and resilience of diverse voices in the jewellery industry."
Sasha V.
Founder and Designer, Adore Adorn

"As a first-generation jewellery designer and gemmologist, I am deeply moved by the industry's rich tradition of being passed down through generations. Many of my peers are second, third and even fourth-generation jewellers, carrying on legacies that shape the fabric of this trade. The Future Jewelers Academy's high school program is a deliberate step towards ensuring this heritage continues. By introducing young talent to the craft, especially in the bench-jewellery sector, which has seen a steady decline, we aim to revitalise a critical pillar of the industry. At BIJC, our goal is not just to create a thriving community, but to build the support systems many of us longed for when we first entered this profession. By fostering a space where professionals can connect, share resources and grow together, we are shaping the future we all needed and about which we continue to dream."
Malyia McNaughton, GG
Co-Founder and Chairwoman Designer/Owner Made by Malyia

PERIDOT

The Gift of Hope



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FILIGREE in Jewellery

A TREND WITH STAYING POWER

Joseph Denaburg gives an account of the use of filigree in jewellery from the Edwardian period to the present day.

Ask someone to describe a piece of antique jewellery, and there is a good chance that the piece will include an ornate design within the metal. Whether swirls or sharp lines, the artistry combined with the openness in the metal adds the type of elegance that can only come from the smallest of details. If the metal design features open spaces or a lace-like pattern, often made of wire, it is considered 'filigree'. If the metal decoration does not completely pierce the design, it is considered 'engraving'.

Lacy filigree-style designs have been popular additions to jewellery for centuries; the style dates as far back as 3000 BCE, specifically to the modern-day city of Midyan in Mardin Province, Turkey. However, the rise of the art nouveau style (also known as the 'modern' or 'Glasgow' style in the United Kingdom), along with changes in metal-working capabilities, initiated an increased use of filigree at the turn of the twentieth century CE. The design form has undergone several cycles of popularity, and has emerged once again as a popular trend among jewellery lovers seeking a look that stands out from the crowd.

THE FUNCTIONALITY OF FILIGREE

Introducing Platinum To Filigree. One of the most important innovations in the history of jewellery making occurred at the very beginning of the twentieth century. In 1903, French engineers Edmond Fouché and Charles Picard developed the concept of oxygen-acetylene welding. This allowed heat to reach higher temperatures for metal cutting, but it also served a unique role within the jewellery industry. Mixing oxygen with acetylene as fuel allowed the average jeweller to heat platinum to a point where the metal could be easily shaped. For the first time, jewellers had access to a delicate white metal that was durable enough to adorn the body and securely hold gemstones.

Prior to this time, when jewellers in Victorian times (and earlier) wanted to create a piece of jewellery using a white metal, they would use silver. While silver

A Victorian-era (ca. 1850–1880) example of a yellow-gold 'Etruscan-style' amethyst bracelet, designed to emulate jewellery from antiquity.

is a beautiful metal, it is fairly soft and requires a significant amount of metal to ensure durability; this meant silver jewellery designs inherently have to be chunky. Additionally, silver tarnishes when it interacts with oxygen, requiring it to be cleaned regularly. Platinum is stable, and able to serve the same purpose using significantly less metal. It also does not tarnish and is hypoallergenic.

The ancient Egyptians were the first to use platinum in jewellery. Pre-Columbian indigenous South American tribes also learned how to shape it long before Europeans. In 1735, Spanish naval officers Antonio de Ulloa and Jorge Juan y Santacilla 'discovered' people in modern-day Columbia and Peru mining the metal, which had first been referenced among European audiences by Italian humanist Julius Caesar Scalinger in the sixteenth century. Platinum was not successfully melted for use in jewellery of the modern era for another two centuries. Details like this truly make one look back and appreciate the lost knowledge and skillsets of these ancient societies.

Regardless of who did it first, by the early 1900s, platinum jewellery was an emerging and highly popular trend, and designers started getting creative with the newly available material.

> The desire for a more distinctive personal appearance means that filigree designs are once again rising in popularity.

Shown here are examples of the platinum-and-diamond filigree drape necklaces that were popular during the Edwardian period. The necklace on the left features approx. 13 tcw diamonds, while the one on the right uses 7 tcw diamonds.

JEWELLERY STYLES INTRODUCE FILIGREE

Edwardian Elegance. Countering the artful elegance of art nouveau, jewellery of the Edwardian period remained ornate while focusing on materials thought of as traditionally valuable. This meant using gems such as diamonds, ruby and sapphire, as opposed to the materials favoured by the art nouveau artists, including opal, mother-of-pearl, malachite and lapis lazuli. While the use of relatively inexpensive materials did not stay on trend, the elegance of the art nouveau swirls certainly did. This transition in jewellery making directly led to the heavily filigreed 'garland style' so commonly associated with Edwardian-era jewellery today. The Edwardian period (1901–1910) may have influenced a return to a more traditional design style, but the use of platinum simultaneously encouraged jewellers to create more elaborate and delicate pieces.

This necklace of gold filigree is from Tomb KV56 (also known as 'The Gold Tomb') in Egypt's Valley of the Kings. It is believed to have belonged to Queen Tausret of the Nineteenth Dynasty (New Kingdom), ca. 1200–1186 BCE. Photo courtesy of the Metropolitan Museum of Art.

Edwardian and art nouveau trends merge in this pendant/brooch combination, created ca. 1900–1915, comprising diamonds, 18K yellow gold and platinum.

Art Deco Filigree. Another advance for the jewellery industry occurred in Germany, when white gold was first introduced in 1912. Despite the significance of this development, the use of white gold did not immediately catch on within the trade, in large part due to the impact of World War I on the relationship between the Central and Allied forces. But by the 1920s, this new material was taking jewellery designers by storm as an easier to work with and less-expensive alternative for platinum.

Following WWI, people in the United States – particularly women – were ready for a significant change in most aspects of life. While the men were off in Europe fighting, American women took responsibility to keep factories running during the war.

This art deco diamond-and-platinum ring (above, ca. 1920s–1930s), showcasing a unique geometric design with European-cut diamonds, is accented by the openness of the intricate filigree.

An intricate emerald, diamond and platinum art deco pendant (right) from the 1920s featuring natural motifs and sharp edges within the filigree design.

Just a few years later, women in the U.S. would receive the right to vote in August 1920; in the UK, women over 30 gained the right to vote in 1918, with all women over 21 allowed to vote in 1928. This new sense of empowerment was reflected in almost every aspect of society, from art to architecture to fashion, in the art deco movement (ca. 1910s–1950s).

Because women of the art deco period were doing more laborious activities than their Edwardian counterparts, jewellery became lower set and easier to wear. The trend of elegant, elaborate filigree was also left behind in favour of innovative (but equally elaborate) designs. These pieces incorporated sharp edges, bold geometry and symmetry. This edgy, futuristic look can be seen throughout art deco architecture, art, fashion and, of course, jewellery.

The Post-War Period to the Present Day. As so often happens with large-scale warfare and the lifestyle changes that must be made to accommodate it, World War II changed the way people in western countries presented in society and in the world. During the war, luxury goods were generally viewed as unpatriotic and unnecessary, but by the end, people with the means to splurge were ready to do so. Just as the end of WWI a few decades earlier had prompted great change, attitudes at the end of WWII directly led to a change in tastes for the arts, including jewellery. Other causes may include the greater accessibility of precious metals that had been restricted during the war, gemstone mines that were

The top portion of this ring, featuring 57 antique-cut diamonds (~4.25 tcw) and a ~3.50 ct peridot set in silver with a filigree design, dates back to the Georgian period (1780s–1830s). It was most likely converted into a ring during the late nineteenth century.

discovered in the preceding decades finally providing enough larger-sized gemstones to fulfil demand and the availability of lab-created gemstones.

Whatever the reason, the post-war style was big and bold. Jewellery wearers traded intricate symmetry for big stones, pearls, asymmetry and a futuristic look. The mid-century and modernist periods that followed focused on new design styles that tended to stray away from the elaborate elegance their parents and grandparents had enjoyed. While the modernists incorporated a great deal of art deco inspiration, the delicate filigree did not necessarily make a comeback until recently. When it did appear, it is generally a more subtle accent and less ornate than in previous incarnations.

Society's appetite for art and style continues to evolve. With mainstream use of the internet providing access to designs once out of reach to a younger audience that values individualism. The desire for a more distinctive personal appearance means that filigree designs are once again rising in popularity alongside other vintage looks undergoing a renaissance. In its current incarnation, filigree is trendy among people who appreciate the intricateness of art from an earlier time, whether a connoisseur of the traditional Victorian designs, elegant Edwardian/art nouveau swirls or bold art deco lines. The concept of filigree has evolved throughout the decades based on style trends and technical abilities, a beautiful reminder that sometimes, negative space is the perfect accent. ■

> In addition to its pleasing form, filigree also serves a much more functional role: providing a large look while using less material.

An art deco filigree platinum pendant (ca. 1920s–1930s) featuring an ~0.50.ct old-mine-cut diamond accented by straight-line filigree and old-rose-cut diamonds.

An art nouveau necklace, ca. 1870–1890, using 18K yellow gold, nine pieces of turquoise and three mine-cut diamonds in a unique filigree design.

All photos are courtesy of Levy's Fine Jewelry unless otherwise specified.

THE PRICING CO-PILOT

Sripriya Yarlagadda and Olga González FGA DGA explore how a newly available tool helps jewellers to competitively price their diamond inventory in real time.

The diamond industry, historically known for its exclusivity, undergoing a transformation thanks to innovative technology platforms such as Liquid Diamonds. At the forefront of this revolution is the company's Pricing Co-Pilot, a cutting-edge tool designed to help jewellers optimise their pricing strategies, enhance inventory turnover and maximise profits. In an ever-evolving diamond trade, the Pricing Co-Pilot offers a much-needed solution for both suppliers and retailers in an increasingly competitive landscape.

Liquid Diamonds, a New York-based company founded by Kashyap Mehta and Mark Molloy in 2017, taps into decades of diamond industry expertise merged with advanced technological development. Mr Mehta's unique background, combining both software and game development with a deep family history in the diamond business, helped shape this vision. "Growing up, conversations at the dinner table often revolved around the challenges in the diamond trade that were holding it back from its true potential," Mr Mehta explained. "Our goal is to democratise the diamond industry, making it as efficient as sectors like auto, finance and pharmaceuticals. By enhancing transparency and liquidity, we aim to attract substantial financial capital and restore consumer trust in a traditionally opaque industry."

Mr Molloy was instrumental in the early stages of the platform's creation. A brilliant man who held thirteen patents across multiple fields, his vision for price discovery in the diamond market helped bring the platform to life. Although Mr Molloy passed away in 2020, Liquid Diamonds continues to honour his legacy.

> The Pricing Co-Pilot ensures that each diamond is priced to sell, reducing the amount of time inventory sits unsold...

A GAME CHANGER FOR JEWELLERS

The key offering from Liquid Diamonds, the Pricing Co-Pilot, addresses one of the diamond industry's biggest challenges—finding the right balance between inventory turnover and profitability. Traditional pricing strategies often pit speed of sales against margins, forcing retailers to choose between the two. The Pricing Co-Pilot seeks to eliminate this dilemma by leveraging real-time data and market trends to help jewellers optimise both their turn and margins. "Our Pricing Co-Pilot uses artificial intelligence (AI) to help diamond suppliers price their diamonds accurately based on market trends," Mr Mehta noted. "This tool empowers suppliers to price their inventory competitively, leveraging real-time market data to drive more efficient sales."

The tool uses a patented auction technology that brings real-time price transparency to the market. Instead of relying on opaque pricing methods and lengthy negotiations, jewellers can now adjust their prices quickly and accurately based on live market conditions. This allows these jewellers to stay ahead of competitors, ensuring they never miss a sales opportunity.

Understanding the Market with Real-Time Data. What makes the Pricing Co-Pilot so powerful is its ability to evaluate each individual diamond in a jeweller's inventory. Using specific criteria—such as carat weight, cut, clarity and colour—the tool compares diamonds against similar stones on various platforms. This ensures that the jeweller always has a clear understanding of where their inventory stands in the marketplace.

"Traditionally, the diamond industry has operated on personal relationships and opaque pricing structures," Mr Mehta notes. "This lack of transparency led to inefficiencies in price discovery and limited access to capital. Our platform is changing that by offering real-time price visibility and creating an open marketplace where buyers and suppliers can interact directly."

One of the standout features of the Pricing Co-Pilot is its automated price adjustment notifications. These alerts are triggered when there are shifts in the market, such as increased competition or changes in demand. By notifying jewellers in real time, the tool allows them to adjust prices quickly, ensuring they remain competitive without the need for constant manual monitoring.

ADVANTAGES FOR JEWELLERS

Time-Saving Capability. Pricing diamonds manually and reviewing prices regularly can be a labour-intensive process. The Pricing Co-Pilot automates this task, allowing jewellers to focus on other essential aspects of their business, such as customer service and marketing.

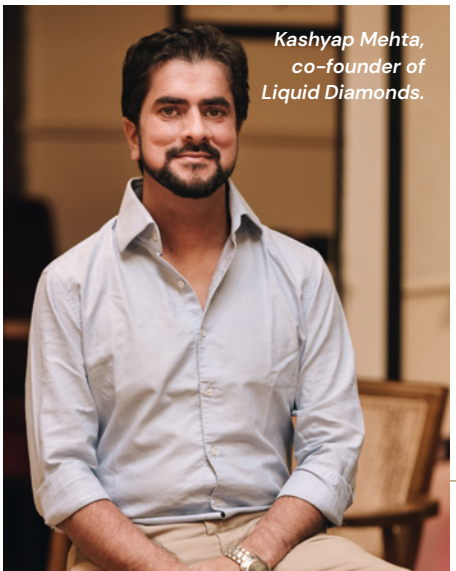
Increased Profitability. By providing real-time market insights, the tool helps jewellers optimise pricing to maximise margins without sacrificing turnover. This results in a more profitable business, as diamonds sell faster and at better prices.

Improved Inventory Management. Slow-moving inventory can tie up valuable capital. The Pricing Co-Pilot ensures that each diamond is priced to sell, reducing the amount of time inventory sits unsold and freeing up capital for new stock.

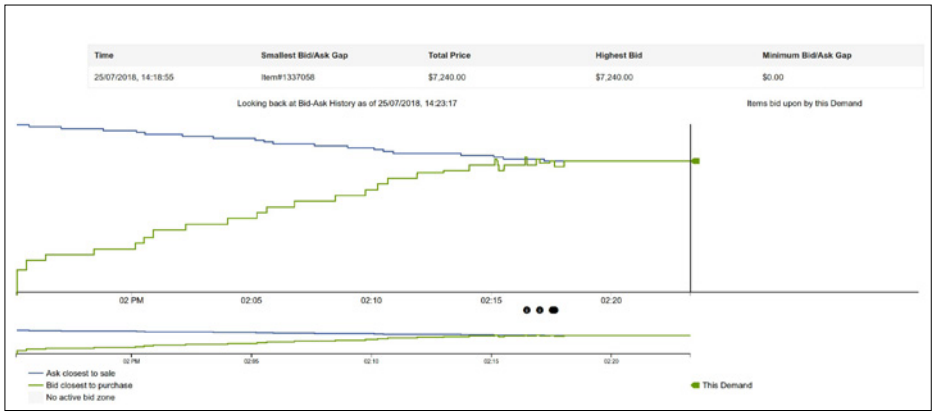
Mr Mehta highlighted how this approach helps jewellers in the United States who often struggle to access the volume discounts available to larger wholesale buyers. Smaller suppliers, especially diamond cutters and polishers in India, also benefit as they typically lack access to global markets. By addressing these challenges, the Pricing Co-Pilot fosters a more equitable diamond industry.

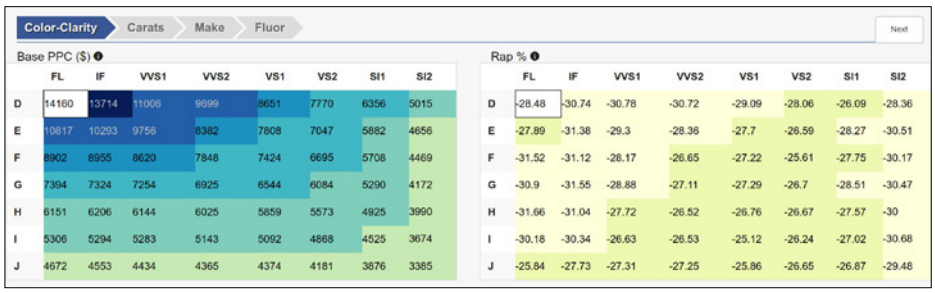
OVERCOMING INDUSTRY RESISTANCE

Integrating new technology into a traditional industry like diamond trading is no small feat. Mr Mehta admitted that their journey was not always smooth. "We initially overestimated our understanding of the market and over-engineered our product, facing resistance from the traditional diamond and jewellery traders," he recalled. "However, we discovered that our platform's ability to constantly monitor smaller suppliers offering the best deals was a key differentiator."



Kashyap Mehta, co-founder of Liquid Diamonds.





Top: A competition graph generated by Liquid Diamonds' patented Reverse Auction System. Bids are sent to hundreds of global diamond suppliers around the world who compete with each other to fulfil the listed demand. Bottom: The company's Market Value Calculator provides information at the client's fingertips, allowing for an informed and efficient pricing strategy.

Despite the initial pushback, Liquid Diamonds has facilitated over $50 million (£37.38 million) in transactions, primarily between New York wholesalers and Indian manufacturers. With the Pricing Co-Pilot gaining traction, the platform is poised for continued growth.

Shaping the Future of Diamond Trading. As the diamond industry continues to evolve, Liquid Diamonds is not resting on its laurels. The platform is constantly being updated to stay ahead of industry trends, including rising consumer demands for sustainability and ethical sourcing.

"We ensure that all diamonds on our platform meet stringent certification standards, including compliance with the Kimberley Process," Mr Mehta confirmed. "We are also evolving our platform to support smaller, independent jewellery retailers who are focused on meeting these new demands from socially-conscious consumers." With plans to expand partnerships with jewellery retailers in the U.S., Liquid Diamonds is committed to democratising access to diamonds. The company's goal is to create a seamless experience for all users, from suppliers to retailers, while continuing to drive innovation in a traditionally slow-to-adopt industry.

LOOKING AHEAD: THE FUTURE OF LIQUID DIAMONDS

The road ahead for Liquid Diamonds is full of opportunities, as Mehta and his team focus on scaling the business. Educating traditional players about the benefits of adopting new technology remains a challenge, but Mr Mehta is optimistic about the future. "Our focus is on delivering value to every customer," he said. "Once we reach a critical mass – estimated at $250 million annually – network effects fully kick in, drawing more buyers and suppliers."

By leveraging the Pricing Co-Pilot, Liquid Diamonds is not just optimising the diamond trade; they are reshaping it for the future. With groundbreaking technology, transparency and a customer-centric approach, Liquid Diamonds is paving the way for a more efficient and accessible diamond industry. ■

All photos courtesy of Liquid Diamonds.

The wedjat *eye was a common theme for funerary amulets. The lapis lazuli plaque (left) dates to the Late Period.*

This Egyptian faience (below) from the Late Period/Ptolemaic Period inlay is a composite hieroglyph, termed the 'Horus of Gold'. The falcon god Horus sits on top of the sign for gold, a collar with ties. This sign appears before one of the royal names, called the 'Horus of Gold name'.

LAPIS LAZULI, TURQUOISE AND FAIENCE AS SERVANTS OF MAAT:

FUNERARY AMULETS IN ANCIENT EGYPT

Sandrine Martin explores the use and importance of blue gems, along with a unique manmade material, in amulets made for burial rituals in ancient Egypt.

Birthplace of the oldest-known civilisation in Africa and continuing until it was absorbed into the Roman Empire in 30 BCE, Egypt was home to one of the most sophisticated societies in antiquity. Ancient Egyptian culture centred on Maat, which was the name of a goddess as well as a word that encompasses several concepts, such as cosmic order, truth, justice and righteousness (Andrews, 1994). The hieroglyphic sign for Maat is a feather, and the goddess Maat is usually depicted with the feather hieroglyph on her head. Maintaining the cosmic harmony, thus ensuring order in the universe and perpetuating the cycles of nature was essential to the Egyptians. Performing rituals and offerings to the gods were part of achieving this goal. Maat, therefore, played a central role in the journey to the afterlife. In the Weighing of the Heart ceremony, the deceased person's heart – the seat of their life-spirit – was measured on a scale against Maat's feather. Hearts heavier than the feather were rejected and eaten by Ammit, the 'Devourer of Souls'.

Amulets were believed to protect their owners from daily misfortune while providing aid and protection on the hazardous journey to and within the Other World. Hence, they played an essential role in funerary rituals. Three of the four Egyptian words translated as 'amulet' (*meket*, *nehet* and *sa*) come primarily from verbs meaning 'to guard' or 'to protect'. The fourth, *wedja*, has the same sound as the word for 'well-being' (Andrews, 1994). Many of the amulets and jewellery worn in life could be worn

in the afterlife. However, funerary amulets (and jewellery) were expressly made for setting on the wrapped mummy on the day of burial (Andrews, 1994). Amulets are accounted for starting in the Predynastic Period and continuing through the Roman Period (see table on p33 for dates). Their use increased during the New Kingdom, peaking in the Late Period (Ikram and Dodson, 1998; Stünkel, 2019).

> Praised by the ancient civilisations for its dazzling and intense colour, lapis lazuli was the most-precious gemstone of the ancient Near East and Egypt.

Archaeological discoveries attest that, as funerary practices evolved, so did the materials of the amulets used (Muñoz Pérez, 2018). Metals and minerals were considered to carry divine essence. Gold, silver and electrum, as well lapis lazuli, turquoise, carnelian, jasper and manmade faience, were used in amulets as representations of the gods. Along with their shape, colour and iconography, the materials used guaranteed the magical power of amulets (Ikram and Dodson, 1998). Symbolically tied to birth, life, regeneration and resurrection, turquoise, lapis lazuli and faience were important materials in ancient Egyptian funerary amulets.

UNDERSTANDING THE EGYPTIAN CHROMATIC UNIVERSE

Egyptologist Bernard Mathieu (2009) writes that "The word 'colour' as it is understood today did not exist in the hieroglyph lexicon. At least two words could be translated to mean 'colour': *jnm* and *jwn*." The first of these terms refers to both a material and to the 'tactile aspect of a surface,' while the other may mean 'pelage/coat'. "Both *jnm* and *jwn* could be used to refer to a person's 'complexion' or 'behaviour'. Ancient Egyptians thereby attributed to colours a symbolic value correlating to their perception of the natural phenomena they saw in these colours: the yellow of the Sun, the green of vegetation, the black of fertile earth and the red of the desert" (Mathieu, 2009).

For most of its history, according to Pinch (2001), the Egyptian language had only four basic (non-specific) colour terms: *km* (black), *hd* (white), *dr* (red) and *w* (green/blue). Mathieu (2009) indicated that the meaning of *w* is 'fresh', suggesting the quality of freshness and humidity, along with viridity, growth or rawness. As such, *w* is the colour of life. As it frequently refers to the vegetal world, notably to the stem of papyrus and to liquid bodies, 'green' is a derived meaning of *w*. Therefore, *w* refers to all shades of colours from green to blue.

A Thoth amulet, made from lapis lazuli, dating to ancient Egypt's Late Period.

To the ancient Egyptians, turquoise was considered a mineral extension of *wahdj*†. When written with the determinant for minerals — three sand grains — *wahdj* was the word used for malachite. Geographically associated, but also organically and chromatically related, the Egyptians brought the two gems together within a complementary system. With copper as part of the composition of both malachite and turquoise, these products of the Sinai show different shades of green, and were therefore both considered to be *wahdj* (Mathieu, 2009).

Wahdj was also the colour of the '*wedjat* eye', which represents the healed eye of the god Horus and the most popular and powerful amulet of ancient Egypt. It embodied healing power and symbolised vitality, rebirth, regeneration and protection. The goddess Hathor, called the 'Lady of Turquoise', is also linked with the *wedjat*.

SOURCES AND HISTORY

Mineral production was considered the province of gods such as Geb, owner of all the wealth of the underground. "Verbs such as *prj* and *bsj* —'coming out' and 'emerging', respectively — were used

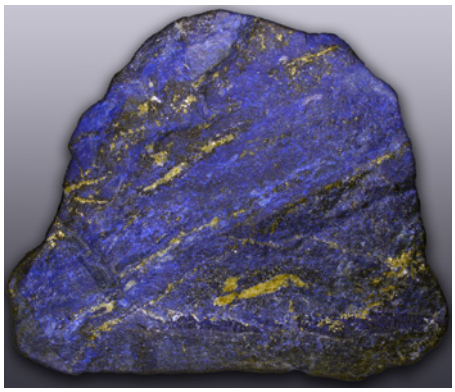
† See p. 34, 'Colour Concept in Ancient Egypt.'

A pendant depicting a ba*-bird with outstretched wings (from ancient Egypt's Late Period). Amulets depicting* ba*-birds would have been placed upon the chest of a mummy. This piece comprises gold, lapis lazuli, turquoise and carnelian.*

to describe the formation of minerals, indicating that they 'grew' under the influence of some powerful force." Aufrère (1997) noted that "Going to the desert, home of the forces generating cosmic disorder (and of the gem mines), was one of the ways of maintaining Maat, whose figurine was made of lapis lazuli. From these mines were also extracted gold, the gods' flesh, silver, the divine bones, the iron of Seth, the magnetite of Horus and turquoise evoking cosmic motherhood."

Turquoise. Known as *mafkat* – a term which also referred to copper and malachite – turquoise was a rare, precious commodity in ancient Egypt. Connected with fertility and vegetation, as well as with joy, creation and life itself, its unique light blue-green colour was much valued. Fashioned into small objects such as beads, turquoise was also used in gold jewellery and divine offerings, including funerary amulets.

Turquoise may have been known to the Egyptians before 5500 BCE, but the earliest evidence of mining, by Bedouin clans of the Sinai, come from fragments of high-quality turquoise found in tombs in the El-Qaa region dating to ~5000 BCE (Schorsch, 2018). Located in the southwest Sinai Peninsula, the most important ancient mines were Wadi Maghara (known to the ancient Egyptians as the 'Terraces of Turquoise')



Turquoise (left) and lapis lazuli (right) were both used in ancient Egyptian funerary amulets and objects, due to the 'divine essence' imbued in the minerals by several of their properties. Photos courtesy of Wikimedia Commons.

and Serabit el-Khadim, where turquoise was mined in antiquity. Wadi Maghara, a modern-day archaeological site, contains pharaonic monuments and turquoise mines from the Old and New Kingdoms.

The interactions between Egypt and Sinai evolved under Sneferu (ca. 2600 BCE), the founding pharaoh of the Fourth Dynasty who was looked upon in later ages as one of the Sinai's protecting divinities. As civilisation developed, the Sinai sources of turquoise, along with its malachite and copper ores, became more important. This was especially true during the Middle Kingdom. Large-scale activity resumed during the reign of Hatshepsut (r. 1479–1458 BCE), the first female ruler of ancient Egypt with the full authority of pharaoh, who reopened the Wadi Maghara mines. At the time of resumed mining activity, Wadi Maghara had not been worked for nearly four hundred years.

The workers dedicated the work to Hathor — the goddess of turquoise and lapis lazuli, as well as malachite, gold, copper and miners — and built temples in her honour. As the goddess of the Sinai, Hathor was also the protector of desert regions. "It is by praying to the goddess Hathor, the Lady of Turquoise, and surrendering to her divine will that the miner will receive the inspiration to discover the mother lode from which he will draw exceptional benefit" (Aufrère, 1997). The last pharaoh to operate

> Turquoise was a rare and precious commodity in ancient Egypt, connected with fertility and vegetation, as well as with joy, creation and life itself.

the mines and leave an inscription at Serabit el-Khadim was Ramses VI (r. ~1145–1137 BCE). The mines were exhausted and abandoned, as was the temple of Hathor, after the Twentieth Dynasty (Khazeny, 2014).

Lapis Lazuli. Praised in antiquity for its dazzling and intense colour, lapis lazuli was the most valuable gemstone of the ancient Near East and Egypt. Referred to by Greek philosopher Theophrastus (ca. 372–287 BCE) as 'sappir spotted with gold', lapis lazuli was traded by the Aryans from the mines of Badakhshan (modern-day Afghanistan) east to Mesopotamia and Egypt. This trade began as early as the second half of the fourth millennium BCE. Nestled in the centre of the Hindu-Kush Mountains, the Sar-E-Sang mines are one of the oldest sources of lapis and historically delivered the finest-quality material (Bancroft, 1984). Mesopotamia was the commercial centre for this material. From there, lapis continued its journey to Egypt during the Predynastic Period, as well as all early dynasties.

Lapis lazuli was called *hsbd* ('heaven' or 'blue stone') in the ancient Egyptian language. Referred to as 'lapis lazuli' or by the epithet 'lady of lapis lazuli', the goddesses Isis, Hathor and Nut are closely tied to the gem. Most of the male deities aligned with Horus bear the name *Hsbd*, connecting them with lapis lazuli as well (Aufrère, 1991). One of the oldest and most significant deities of the Egyptian pantheon, Horus – the son of Osiris and Isis – was affiliated with the sky, the Sun, kingship and protection, and was commonly depicted as a falcon or as a falcon-headed man. In turn, the pharaohs were regarded as the earthly embodiment of Horus. Lapis lazuli ornaments were an honour reserved for princes and divinities. Such representations, along with their ownership, were an indication of political and religious power (Casanova, 2001).

PERIODS OF ANCIENT EGYPTIAN CIVILISATION*

Predynastic Period and Early Dynastic Period
~5000–2675 BCE
Old Kingdom
~2700–2200 BCE
First Intermediate Period
~2200–2050 BCE
Middle Kingdom
~2050–1800 BCE
Second Intermediate Period
~1650–1550 BCE
New Kingdom
~1550–1100 BCE
Third Intermediate Period
~1100–665 BCE
Late Period
~665–332 BCE
Argead Dynasty
332–310 BCE
Ptolemaic Dynasties
310–30 BCE
Roman and Byzantine Egypt
30 BCE–641 CE
**Dates are approximate*

A lapis lazuli heart amulet dating from ancient Egypt's Late Period.

THE CONCEPT OF COLOUR IN ANCIENT EGYPT

'Blue'
Notions and perceptions of 'colour' are not universal. 'For several millennia [blue] was considered in the West only as a black of a particular type' (Pastoureau, 1990). The equivalent of the modern 'blue' is non-existent in the Pyramid Texts, the oldest ancient Egyptian funerary texts reserved for the pharaoh, dating to the Old Kingdom.

The colour for lapis lazuli – *hsbd* – was conceived as a variant of black. Notably used for divine hair, it had eminently positive connotations.

Azurite - *tfr* 

Lapis lazuli - *hsbd* 

'Green' and 'Blue-Green'
Symbolically linked with notions of virility, fertility and growth, *wahdj* was the colour of freshness and humidity, vegetation and new life.

The hieroglyph for green is a papyrus stem and frond. Doing 'green things' was adopting a positive behaviour, asserting life itself. Together with black, it was the colour of resurrection.

Wahdj 

Malachite 

Turquoise 

Colour swatches courtesy of Wikimedia Commons.

From this context comes the belief, widespread in the Near East and Egypt in the third and second millennia BCE, that "to possess a plot of lapis lazuli is to possess a plot of the divine" (Aufrère, 1997). Casanova (2001) noted that the relationship between lapis lazuli, great gods, supernatural vital energy and the sky/Heaven is inseparable from various shades of blue, thanks to the symbolism associated with the colour (which was considered a variant of black, a colour which was considered positive by the ancient Egyptians). According to Aufrère (1991), "The reasons for the craze for this mineral lie solely in its colour and the inclusion in its mass of small fragments of gold, which facilitated its assimilation with the night or the starry sky."

Faience. Known as early as the end of the fifth millennium BCE, Egyptian faience (or faïence) may have been developed to simulate highly prized, rare blue stones. The Egyptian method, which involved the sintering of quartz over an object to produce a glassy and colourful coating, differed from tin-glazed pottery style of faience popularised in the Middle Ages.

The ancient Egyptian word for faience, *tjehnet*, means 'brilliant' or 'scintillating'. One of the most popular manmade materials used for amulets, faience could be produced in the shades of green and blue that were associated with life and regeneration (Stünkel, 2019). The shiny, bright-blue glaze of this manmade vitreous material symbolically granted precious objects life, viridity, fertility and eternity.

Linked with the ever-rising gleaming sun and the idea of rebirth, objects created with faience were considered magical by ancient Egyptians. Faience was also inlaid into furniture and into walls as tomb and temple decoration (Riccardelli, 2017). Fishnets made of blue faience, on which funerary amulets were hung, were placed over mummies from the Late and Greco-Roman Periods (Andrews 1994).

FUNERARY AMULETS OF ANCIENT EGYPT

According to Aufrère (1991), lapis lazuli represented the night and the cosmic immensity, as well as a principle of possible regeneration, while turquoise was tied to nocturnal light and connoted union, future parturition, the joy of birth and rebirth. Faience represented the glow of the stars and was always considered a good omen. All three materials acted as potent materials in the funerary trousseau.

> As funerary practices evolved, so did the materials of the amulets used in those practices.

Usually placed close to the body between the mummy's bandages (Albert, 2012), amulets depicted animals, deities and objects in miniature. A large number of amulets showed deities and in their chosen animal-manifested form. Both turquoise

This amulet of the goddess Maat, carved from lapis lazuli, dates from the Late Period of ancient Egypt's civilisation. When found on a mummy, the Maat amulet is on the chest (Andrews, 1994).

Another example of the wedjat *eye theme for funerary amulets, this Egyptian faience amulet is from the Third Intermediate Period.*

(stone and colour) and lapis lazuli were used in scarab beetle artefacts, which symbolised the eternal life/rebirth cycle. Worn as a form of protection, the scarab was a symbol of the sun god Re. The scarab amulet became an essential element of the funeral trousseau by the New Kingdom Period. It was intended to restore to the deceased the use of his heart, not as a vital organ but as a seat of thought (Ziegler, 1999). The heart, or *ib*, was the most essential organ to the Egyptians. The seat of intelligence and the storehouse of memory, it was the originator of all feelings and actions. Winged scarabs were also extremely popular funerary amulets that were intended to guarantee the rebirth of the deceased. Consisting of three pieces – an actual scarab beetle and two separate bird wings – each of which was fastened to the wrappings of a mummy.

Thoth, the god of the moon and of wisdom, was usually represented in human form with the head of an ibis. Scribe, interpreter and adviser of the gods, he is also the representative of Re. Thoth amulets had a purely funerary connotation (Andrews, 1994), as Thoth weighed the hearts of the deceased at their judgment and reported the result to the presiding god Osiris and his judges. Thoth's sacred animals were the ibis and the baboon, particularly the latter. The vignette to chapter 125 of the Book of the Dead, depicting the weighing of the heart, occasionally shows Thoth recording the result of the weighing in his baboon form (Andrews, 1994).

A lapis lazuli ba *amulet dating from ancient Egypt's Late Period.*

→

A lapis lazuli falcon amulet from the Late Period/Ptolemaic Dynasties era of Egyptian history.

This glazed steatite scarab, inscribed 'Hatsheput, United with Amun', was found in Hatsheput's funerary temple at Deir el-Bahri in Western Thebes. It dates to Egypt's Eighteenth Dynasty (New Kingdom period).

Associated with several prominent gods, the falcon was believed to provide protection from the malevolence of Seth, god of the desert, disorder and violence (Andrews, 1994). The falcon was revered as the king's guardian and a representation of Re, thought of as the first pharaoh of ancient Egypt. Re was also the god of order, kings and the sky who ruled in all parts of the created world, including the Underworld. Re shared characteristics with Horus, who was also portrayed as a falcon. Another association with Horus on funeral objects was the Eye of Horus, a symbol of healing, protection and regeneration. In Egyptian mythology, Horus was told by his mother, Isis, to protect the people of Egypt from his uncle Seth, who had killed Horus' father, Osiris. Horus' eye was injured or stolen by Seth, and restored by another deity (either Thoth or Hathor). The *wedjat* eye thus became the embodiment of healing power and a potent symbol of rebirth.

The *ba*, or 'the immaterial manifestation of a human being' was a link between the world of the dead and that of the living. Depicted as a human-bird hybrid – a combination that represented its ability to travel to different realms – the *ba* travelled across the sky in the sun god's boat and witnessed the weighing of the heart in the underworld (Andrews, 1994). *Ba*-bird amulets were placed on the chest of a mummy, though amulets in the shape of a *ba* with outstretched wings do not appear before the interment of Tutankhamun.

Death was considered a continuation of life in the religion of the ancient Egyptians. However, entry into the afterlife was not guaranteed. The deceased had to face a perilous journey before facing the Final Judgment ceremony. Only those whose hearts were found to be lighter than the feather of Maat would be admitted into the Underworld.

Funerary amulets, intended to confer their protection to the deceased, played a crucial role throughout this journey. These amulets relied upon their materials and colours, as well as their shape and symbols, for their power. Considered divine gifts by ancient Egyptians, lapis lazuli and turquoise embodied resurrection and life. These qualities made the blue gems – along with the faience created to mimic their powerful properties – potent materials to use on the funerary amulets that accompany the deceased through the afterlife. ■

All photos courtesy of the Metropolitan Museum of Art unless otherwise indicated.

A list of references is available upon contacting the Editor.

This article is part of a longer piece that ran under the title 'Celestial Turquoise' on the author's website.

A ring from ancient Egypt's Middle Kingdom period uses a small, uninscribed turquoise scarab. This ring would have been worn as a protective amulet or as a piece of jewellery.

Futurespective

The Castro NYC Retrospective at Carpenters Workshop Gallery

Olga González FGA DGA and Sripriya Yarlagadda discuss the upcoming exhibition of Castro NYC's work, opening in London in October 2024.

In the realm of contemporary jewellery design, few figures have left as indelible a mark as Terry Castro, known widely under the brand Castro NYC. This autumn, Carpenters Workshop Gallery will celebrate his legacy with the exhibition *Futurespective*, a journey through his bold, otherworldly and genre-defying work. Held at London's Ladbroke Hall, the exhibition will run from 8 October 2024 to 11 January 2025, offering visitors an unparalleled opportunity to immerse themselves in Castro's artistic evolution, his creative process and the lasting impact of his work on the world of jewellery.

A REVOLUTIONARY APPROACH TO WEARABLE ART

Terry Castro's work is a study in contrasts: dark yet luminous, grounded in history yet futuristic in execution,

Terry Castro designed and created jewellery under the name Castro NYC until his death in 2022. His child, Sir King Castro (above) is preserving their father's legacy and artistic mission through activities such as the Futurespective exhibition in London.

fantastical yet deeply human. His ability to meld these dualities into jewellery that pushes the boundaries of wearable art has earned him a place among the most innovative designers of his generation.

The *Futurespective* exhibition will showcase key pieces that define Castro's artistry and his unique approach to materials, symbolism and storytelling. Castro was never content to design simple accessories; each piece has a complex narrative, weaving together elements of African cultures, mortality, mysticism and the human connection to the animal kingdom. His creations, from the intricate gold-leopard Catamando ring to the multifaceted Drip earrings, convey a fusion of power, spirituality and a deep connection to history.

Among the standout pieces featured in the exhibition are the Falcon Crest, which epitomises Castro's flair for combining historical artefacts with modern-day luxury materials. The central porcelain bisque doll, with wings made of sterling silver, and owl feathers adorned with rubies, emeralds and coloured diamonds give life to a mesmerising piece that brings the past and present into harmony. The use of keshi pearls – known for their symbolism of purity and opulence – adds another layer of depth to this work, making it both a visual feast and an intellectual contemplation.

Crafting a Narrative Through Jewels. What sets Castro apart from other designers is his approach to the medium. Each piece he created tells a story, some of which draw on personal influences, while others delve into

The top of the Drip earrings (2019) represent the hood of a cobra. The earrings, which each measure 7.7 x 1.5 cm (the pair weighs 27 g), comprise 18K gold, sterling silver, white and brown diamonds, rubies, freshwater pearls and colour-change garnets.

universal themes. *Futurespective* brings this storytelling aspect to the forefront, inviting visitors to explore the inspirations behind the jewels. His works, particularly those that highlight African heritage and spiritual power like the Catamando ring and Drip earrings, celebrate cultural diversity and show his understanding of identity, power and self-expression. The Money brooch, a playful yet masterfully crafted piece, stands as a testament to his sense of humour and experimentation.

> It is said that Castro worked almost entirely from intuition, refusing to conform to trends or market demands, which allowed his art to evolve freely.

At *Futurespective*, jewellery enthusiasts will also find a trove of archival materials. These include Castro's original sketches, unfinished projects and even personal items from his studio. These artefacts offer a window into the artist's mind, showing how his creative process evolved over time and how personal identity, travel and global cultural experiences influenced his work. His move to Istanbul in later years provided fresh inspiration, particularly in terms of craftsmanship. His collaborations with master jewellers in Türkiye's Grand Bazaar brought a new dimension to his already richly detailed work, introducing even more traditional methods of jewellery making to his toolkit.

FROM TOLEDO TO THE WORLD: THE STORY OF TERRY CASTRO

Born in Toledo, Ohio in 1972, Terry Castro grew up in a post-industrial city, where his artistic inclinations were first nurtured by his mother. Mary Castro introduced him to the worlds of travel, fashion and culture at a young age, fostering his interest in transformation and adornment. These early experiences sowed the seeds for what would become Castro's lifelong exploration into the symbolic power of jewellery.

Castro's career, however, did not follow the traditional path to success. His entry into the jewellery world was marked by a series of unpredictable turns, beginning with his years as a struggling shop owner. It was not until his move to New York City in 2006 that Castro truly found his footing in the fashion world. Immersing himself in the vibrant artistic culture of the city, Castro established himself as a designer who embraced the raw, dark and often unconventional sides of the human experience.

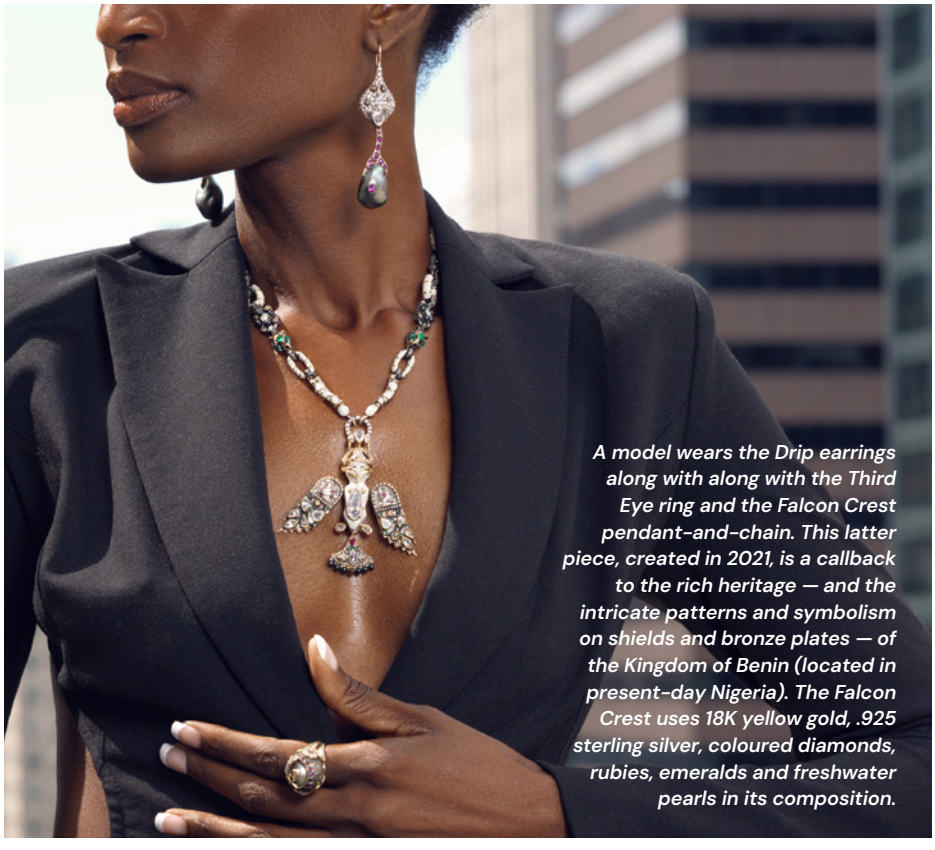
His time in New York also marked a significant period of growth, during which he attracted a diverse clientele ranging from collectors of fine art to fashion-forward celebrities. His studio became a hub of creativity and innovation, where ideas were born out of his personal Dreamscape, a conceptual space where Castro visualised his intricate creations. It is said that he worked almost entirely from intuition, refusing to conform to trends or market demands, which allowed his art to evolve freely.

CONTINUING THE LEGACY

In the aftermath of Castro's death in 2022, his child, Sir King Castro, has taken up the mantle to preserve and honour their father's legacy. Sir King has played a pivotal role in bringing *Futurespective* to life, ensuring that the exhibition not only celebrates Castro's well-known works, but also reveals previously unseen elements of his creative journey. Through the following conversation, Sir King offers insights into the legacy of Castro NYC, their father's philosophy on design and what lies ahead for the future of the brand.

Can you tell us a bit about your background? How did you decide to become involved in your father's jewellery business, and later his legacy and exhibition?

I grew up in Toledo, Ohio, and spent my childhood between there and New York City, where my dad lived for ten years. Until I was about 15, I was studio assistant every summer, and sales assistant at our table in SoHo. So my dad's practice was a normal part of life for me. I would do a lot of grunt work, running pieces back and forth from East Harlem to 47th Street, where the Diamond District is, and doing small repairs. Basically, whatever needed to be done, I did. I stopped working with my dad for a few years as I was preparing for college. I studied theatre intensively in middle/high school and trained at an acting conservatory in Chicago for two years. By the second year, I had a typical art-school experience of losing my love for →



A model wears the Drip earrings along with along with the Third Eye ring and the Falcon Crest pendant-and-chain. This latter piece, created in 2021, is a callback to the rich heritage — and the intricate patterns and symbolism on shields and bronze plates — of the Kingdom of Benin (located in present-day Nigeria). The Falcon Crest uses 18K yellow gold, .925 sterling silver, coloured diamonds, rubies, emeralds and freshwater pearls in its composition.

the craft, so I started to get back into design to reconnect with my creativity. The pandemic hit halfway through my second year of school, and by the next winter I had dropped out and was in Istanbul with my dad. That was the start of diving deeper into the business and craft behind Castro NYC.

What does the *Futurespective* exhibition mean to you, and to the legacy of your father?
To me, it's a nod to the fact that Castro NYC's work was way ahead of its time. It is still ahead of our time, even as we are celebrating his work posthumously. When I was younger, I always thought to myself that my father will be like Van Gogh in the sense that his genius would only be truly appreciated after he was gone. Thankfully, he got some of his flowers while he was still with us.

Can you share any insights into the process of selecting the pieces for this retrospective? Were there any pieces that were particularly significant to you or that you were particularly excited to showcase?
It was important to me to find as many early works as possible to display, to show his progression as an artist. I'm happy to say that there will be a selection of pieces that range from as far back as 2006, when he first established the brand, all the way through 2022. I've mentioned a jade ring that I'm totally in love with, but I'm also excited to showcase the Money brooch, which was made with emeralds provided by Muzo. It's a beautiful abstract piece that is a great example of how Castro NYC challenged the conventions of jewellery.

The Third Eye ring includes an unusual detail: A freshwater pearl sits within the ocular structure, set with an arrangement of assorted diamonds. The 'eyeball' is articulated, similar to a doll's eye, opening and closing with the wearer's motions. The ring uses 18K yellow gold, sterling silver, coloured diamonds, white diamonds, brown diamonds, yellow sapphires and rubies.

How did you and Carpenters Workshop Gallery collaborate on this exhibition? What were some of the challenges and highlights of working together on this project?
When my father passed away, it was imperative to me that he received the proper recognition for his contribution to arts and culture. A retrospective was my first stipulation when it came to working with the gallery. I had opportunities to sell everything more than once, but it's more important to me that my father is remembered, and that Castro NYC is a part of history when young jewellers and artists sit down to read books on contemporary jewels and jewellery history. Money is cool, but legacy is something that you can't put a price tag on.

Cataloguing and dating the work has been a huge task, but the gallery has been very supportive throughout the process, and they've been there to own their part in this historic event. They have done an especially excellent job with the scenography, and I'm excited for people to experience the exhibition through the curated space.

Your father was known for his unique artistic vision. How would you describe his approach to jewellery design? What do you think made his work stand out in the industry?
One thing that surprised me when going through archives was that my father didn't sketch much! He preferred an intuitive approach, one that tended to start with the materials rather than sketches. There are several large pieces

Above: Leopards had a major impact on the cultural beliefs and traditions of the Kingdom of Benin (ca. 1180–1897). This made the big cats a common artistic motif among the people, who were also renowned as masters in metalworking and bronze casting. In the Catmando ring – made with 18K gold, sterling silver, jade, rubies, sapphires and emeralds – Castro NYC honours the Benin civilization's reverence for leopards as well as their artistic heritage.

Right: The Money brooch (2021), which can also be worn as a pendant, resembles an elf-like character that Castro NYC explains shows both 'playful charm' and 'sophistication'. The piece measures 6.3 x 2.0 x 1.0 cm and weighs 13 grams. It is composed of 18K gold, Muzo emeralds and bronze.

When creating these red coral earrings, Terry Castro carefully applied enamel to accentuate the intricate patterns of the coral pieces (which are set in sterling silver). The other materials used in the earrings are 18K gold, rubies, emeralds, diamonds and freshwater pearls.

that were 'finished' that he decided to completely start over and do a different design. It was trial-and-error, but it was also very precise at times. I believe most of the creative process existed in his head and in his hands.

What role did you play in assisting with your father's final creations, and how did it feel to be part of that process?
My touch in the process was light, but he always asked for my input on various designs. For example, I chose the configuration of the stacked brown and white diamonds on the chest of the Falcon Crest pendant. I won't overstate my input; I was there to learn and support my father in whatever he needed. This tended to involve myself working in the capacity of a production manager, taking my father's notes to craftsmen and overseeing quality control. Terry Castro was not a linear thinker, so working under him involved a lot of interpretation and taking initiative. He was also notorious for changing his mind, so it required a high level of flexibility. It made me into who I am now as a businessperson. I think a lot about problems that plagued him, and have worked to solve them and bring the business operations to a higher level.

How do you think your father's work has influenced the field of contemporary jewellery design? Are there any aspects of his work that you believe have had a lasting impact?
Definitely. I see pieces of Castro NYC across the whole jewellery landscape now. Obviously, it's hard to pin down if someone was inspired, but he was part of an 'in' crowd in the art world for a very long time. There are some big brands that I see and sometimes wonder if they crossed paths with him, because of the similar techniques or references. I can't claim anything in particular, but I do think that his approach when it comes to texture – and the 'hand-work' feel that his pieces have – has been adopted widely.

The Coat of Arms lock pendant was created to honour the beauty of celestial bodies and the skyscape. With the cabochon sapphire that represents the sky itself, the sterling-silver moon and stars are adorned with white diamonds, Terry Castro created an image that truly reflects a nighttime sky. The pendant also features 18K yellow gold, blue sapphires, white diamonds and bronze.

How do you hope people will remember Terry Castro through this exhibition? What do you want visitors to take away from their experience?
I hope that when people come to the exhibition, that they can get a fuller picture of Terry Castro than has ever been available before. He made his way from the Rust Belt to the upper echelon of jewellery design in a crazy-short period of time. There's a story in the visual progression of the jewels, as well as his inspirations and references.

HONOURING A VISIONARY

Terry Castro's work was imbued with a strong social consciousness. His commitment to ethical sourcing, sustainability and his activism in the movement for Black freedom were integral to his philosophy as a designer. This element of his work is poignantly explored in *Futurespective*, which includes a section dedicated to his advocacy and charitable endeavours. As Mr Castro's designs were often a reflection of his engagement with the world's most-pressing issues, visitors will gain a deeper understanding of how his jewellery functioned not only as adornments, but also as commentaries on societal and personal struggles.

AN INVITATION TO EXPERIENCE THE DREAMSCAPE

Futurespective invites visitors to step into Terry Castro's world — to experience the magic of his creations, to reflect on his groundbreaking contributions to contemporary jewellery, and to appreciate the ways in which his vision continues to resonate today. The exhibition promises to be a captivating journey into the heart and soul of a visionary artist for everyone, from longtime admirers of Castro NYC to those discovering his work for the first time.

As the exhibition's title suggests, *Futurespective* is not merely a retrospective look at Mr Castro's past; it is also a forward-looking tribute to his ongoing influence. Through this event, Carpenters Workshop Gallery offers a fitting homage to an artist whose life and work will continue to inspire and captivate generations to come. ■

All photos courtesy of Castro NYC.

The 2024 Photographer of the Year Competition

Gem-A's annual photography contest is open and accepting photomicrographs for submission.

This photomicrograph, Spessartine Crystals with Two-Phase Inclusions In Aquamarine from Pakistan, was first-runner-up in the 2023 Photographer of the Year Competition. Photomicrograph by Sammantha Maclachlan FGA, field of view 1.0 mm.

Each autumn, the Association receives photos from Students, Alumni, Members and gem enthusiasts around the world for our Photographer of the Year competition. These images show the astounding gem-related scenes that our participants have photographed throughout the year. The contest is a highlight of the year for everyone involved.

This year, we will shine a spotlight on the inner world of gemstones by focusing on photomicrographs. The internal landscapes of gems reveals much about the environment in which they developed. In the words of gemmological pioneer Dr Eduard J. Gübelin, "Inclusions in gemstones speak eloquently of the geological origins and subsequent history of their costly host. All we need to do is open our eyes and explore." At the same time, the scene discovered within a gem, thanks to the use of a microscope, can be as visually arresting as the specimen itself. For the 2024 Competition, we are challenging entrants to reveal these miniature scenes to the world by submitting photomicrographs for consideration.

After a curated shortlist is subject to a public vote on Facebook, our guest judge will select one first-place winner and two runners-up; honourable mentions may also be granted. Among other prizes (see below), the first-place winner have their photomicrograph on the cover of the Winter 2024 issue of *Gems&Jewellery*.

The Photographer of the Year Competition is free and open to the general public. We welcome submissions from longtime participants and novice contributors, from enthusiastic amateur gemmologists and established members of the profession. Previous Competition winners are also encouraged to enter. We are excited to receive the beautiful, diverse range of photographs our entrants will send from around the world.

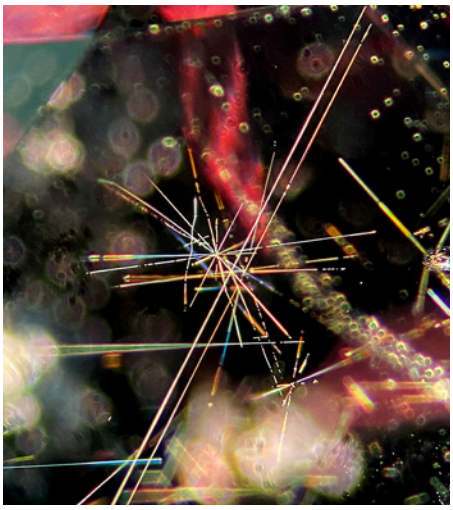
COMPETITION RULES

- A maximum of three photographs may be entered per person
- Photographs must be in .jpeg or .tiff format; no other formats will be accepted
- Photographs must be a minimum resolution of 2400 x 3600 pixels (9 mb).

Valentin Fejoz's entry of a raw topaz from Pakistan received a Special Mention in 2023. The large main inclusion is mica; the small inclusions are mica, tourmaline and other, unidentified minerals. The topaz was captured via a stacking of twenty-two photos in cross-polarized light. Photomicrograph by Valentine Fejoz, field of view ~2.7 mm.

The scene discovered within a gem, thanks to the use of a microscope, can be as visually arresting as the specimen itself.

- Photomicrographs must be accompanied by field of view of the length, or longest-edge dimension, of the image for proper digital representation*
- Entries must be accompanied by your name and post-nominals (if applicable)
- Images must be captioned and include the following:
  - Host material and inclusion type
  - Locality of material (if available)
  - Equipment used to take the photomicrograph (e.g., camera, microscope)
  - A description of no more than 150 words telling the story behind the photograph must be included



The Christmas Star, by Dr Clemens Schwarzinger, was the winner of the 2021 Photographer of the Year Competition. The photo shows rutile needles in the shape of star found in a colour-change garnet from Tunduru, Tanzania.

- All photographs entered into the contest must have been taken within the last twelve months
- By entering the Photographer of the Year Competition, you accept and acknowledge that your image may be used in *Gems&Jewellery* magazine, on the Gem-A Blog and on Gem-A's social media channels. You will always be credited as the creator of the work.

**To calculate field of view, multiply the magnifying power of all of the optics between the sample and the camera. Determine the physical sensor dimension along the longest edge of the camera sensor (which should be published by the camera manufacturer). Divide the physical sensor size in mm by the magnification factor to determine the field of view.*

Alternatively, you can capture an image and, using the same magnification and camera arrangement, use a small scale (calibration slide, or table gauge) to physically measure the same field of view as the image that was just taken. This would be useful when taking a photo with a mobile phone should it not be possible to determine the magnifying power of the optics built into the phone's camera.

HOW TO ENTER

Email all entries to *editor@gem-a.com*. Please send files larger than 10 mb via Dropbox.com or WeTransfer.com to *editor@gem-a.com* (these are free-to-use media transfer services).

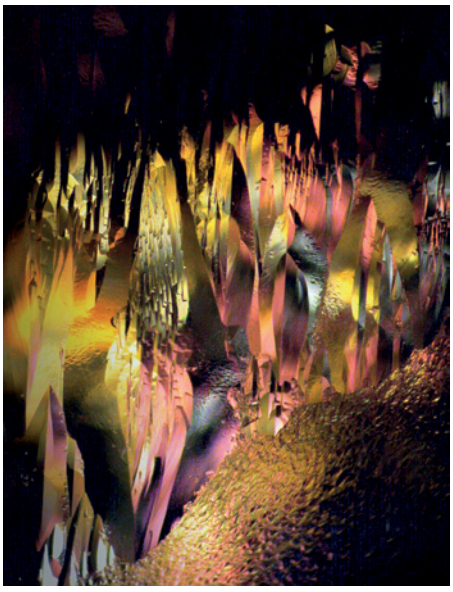
The competition is now open, and anyone may enter at no cost. We will be accepting photos until 15 November 2024. The ten photos selected for public voting will be posted to Facebook, and voting will be open until 6 December, with the five shortlisted finalists shortly thereafter. The winner and runners-up will be announced on Gem-A's social media channels in mid-December; all three will be featured in the Winter 2024 issue of *G&J*.

For more information on the contest rules, or on how to enter Gem-A's Photographer of the Year Competition, please contact *editor@gem-a.com*.

JUDGING PROCESS

The *G&J* team will select ten entries, which will then be posted to our Facebook page for a public vote to create a shortlist of five finalists. Your 'Like' may be the one that pushes a photograph onto the shortlist, so be sure to follow us on Instagram (*@GemAofGB*).

A guest judge will then choose a first-place winner and two runners-up from the shortlist.

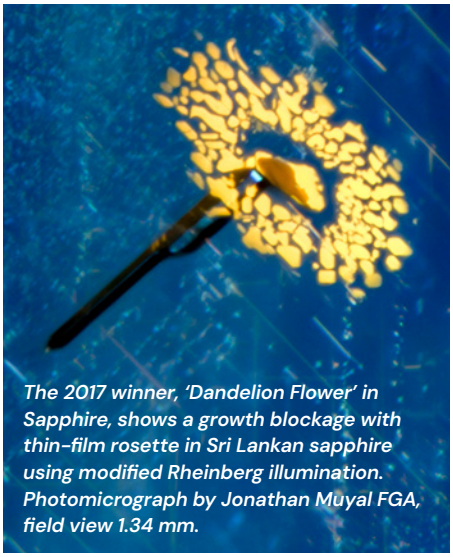


This photomicrograph of a rippled area (growth patterns) on one edge of a 140 ct colourless beryl crystal took first prize in the 2018 Competition. The photographer used two pinpoint illuminators set at different intensities and angles and transmitted light with partially-crossed polarisers. Photomicrograph by Anthony de Goutière GG CG.

PRIZES

The first-place winner will have their photograph on the cover of the Winter 2024 issue of *Gems&Jewellery* magazine. Additionally, the first-place winner will receive a one-year Gem-A Membership and a £300 voucher to spend at Gem-A Instruments. The two runners-up, who will be featured within the Winter 2024 issue, will each receive a £50 voucher redeemable at Gem-A Instruments.

Good luck to all who enter!



The 2017 winner, 'Dandelion Flower' in Sapphire, shows a growth blockage with thin-film rosette in Sri Lankan sapphire using modified Rheinberg illumination. Photomicrograph by Jonathan Muyal FGA, field view 1.34 mm.

The 'Three Scottish Jewels' were all created in Scotland in the sixteenth century. The Penicuik Jewel (left) was created from gold, enamel and pearls with miniature portraits. The Corsewall Jewel (centre), also made in Scotland in the sixteenth century, is a gold-and-enamel locket, while the locket on the right comprises gold, enamel and pearls.

Decoding the Jewels: Renaissance Jewellery in Scotland

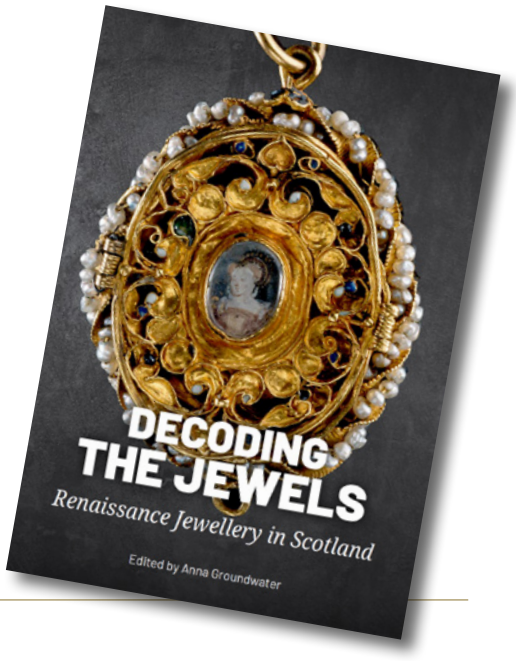
Reviewed by Dr Karen Westland

Decoding the Jewels: Renaissance Jewellery in Scotland aims to reveal the complex narratives, provenance and history of Renaissance jewellery in Scotland. Utilising the latest technology and rigorous research drawn from an international network, highly political and religious covert meanings in jewellery are uncovered to offer a vibrancy of personal strife, devotion and hunger for power in Renaissance-era Scotland.

Anna Groundwater – principal curator, Renaissance and Early Modern History at National Museums Scotland (NMS) and editor of this book – has compiled seven essays that build a series of impressions around the design, culture, politics, religion, monarchy and trade of jewellery in, and associated with, Scotland during the sixteenth century. The book has strength in the sum of all its parts: offering the reader a greater awareness of how royalty, the elite, goldsmiths and portrait artists built close connections through creating and gifting intimate commissions. Jewellery was an essential mechanism for diplomacy; such pieces demonstrated power and wealth and communicated allegiances for royalty, as illustrated through the sixteenth-century cameos of Mary, Queen of Scots. Commissioned by Mary to be gifted to friends, the jewels ensured that she was remembered in her absence, during captivity in England and even after her execution.

The book is accessible to those without prior knowledge of the subject, whilst also appealing to those interested in Scottish history, Renaissance fashion, European monarchies or the Stewart royal court. *Decoding the Jewels* invites you in with high-quality, sumptuous images, with similar – yet rarely

Edited by Anna Groundwater, hardcover and paperback, 200 pp., illus., publ. by Sidestone Press, Leiden, the Netherlands, £95.00 hardcover/£40.00 paperback. Open-access version available (see Editor's Note).



> Jewellery was an essential mechanism for diplomacy; such pieces demonstrated power and wealth and communicated allegiances for royalty.

repeated identically – illustrations for convenience when a particular artefact is referred to across the chapters.

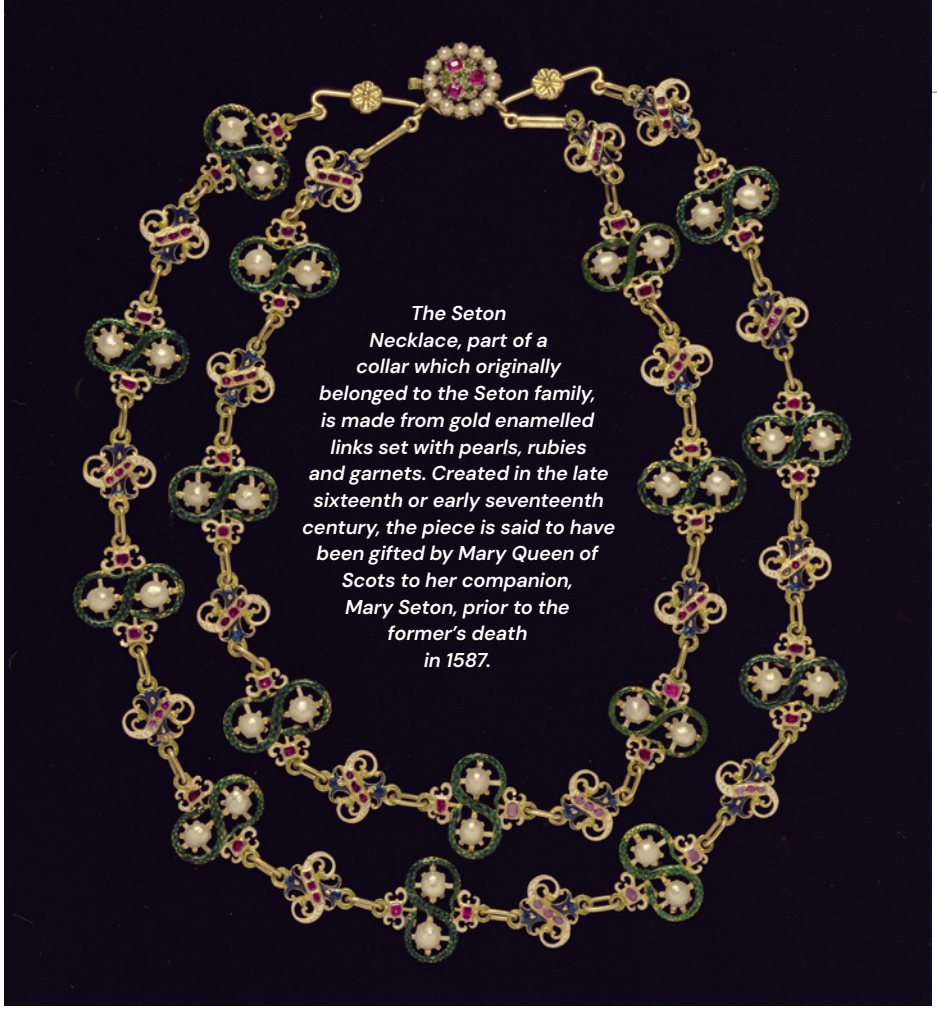
The curation of knowledge brings significant items in the NMS collections and associated artefacts to life, offering the opportunity to dig into the world in which these items were commissioned, gifted, worn and repurposed before arriving within their respective private and public collections. The essays within the volume offer a deeper interaction with the artefacts than one might experience wandering through the NMS Renaissance Gallery exhibits in isolation, particularly given that a multitude of the artworks referenced do not reside within this gallery.

Groundwater's introduction sets the scene for the essays, which uncover the history and meanings of Scottish Renaissance jewellery through the few surviving jewels, paintings and literary sources. The enquiry set out is to understand the contexts within which items such as the Fettercairn Jewel have traversed over time: where was it made, and for whom was it made; what does the decoration mean; why was it kept intact and not remodelled like most jewellery of the period? The essays comprise both research and theory, which are made explicit by the differing opinions of the authors. Interpretations emerge through the collective research for readers to implicitly build a framework to define Scottish-style Renaissance jewellery.

Placed front and centre in the book is the Fettercairn Jewel. Multiple symbolic 'walkthroughs' and inquiries are made of this piece (Chapters 1–3 and 8), supported by images of the Jewel itself and the relevant artworks and jewellery to evidence the interpretations. At first glance, the reverse of the Fettercairn Jewel – which depicts a scene of the Roman god Mercury – appears to be a bizarre scattering of motifs, but the essays make clear the symbols and likely narratives intended for the wearer to bestow. The differing perspectives around the symbology and overall narratives make clear the chasm between what those in the sixteenth century and what people in the twenty-first century would understand the Jewel to mean. The laboratory analysis in Chapter 8 reveals aspects of how the Fettercairn Jewel was crafted through non-invasive studies, which offers yet another layer of understanding to the Jewel: to contextualise the material provenance and the goldsmithing and enamelling techniques.

This gold finger ring, dating from the late eighteenth century, is set with a sixteenth-century cameo of Mary, Queen of Scots. Lent to NMS by Mr and Mrs Geoffrey Munn.

Essays in Chapters 4–7 broaden the discussion. The Darnley Jewel (also known as the Lennox Jewel, now part of the Royal Collection) presented in Chapter 4, exposes a similarly elaborate gold-and-enamel gem-set jewel, laden with symbolic intrigue not unlike the Fettercairn Jewel. Chapter 5 explores the Scottish Renaissance jewels in the NMS collection, which contributes toward outlining the likely material provenance and identities of the Edinburgh-based goldsmiths and miniaturists (small portrait painters) working within royal circles at the time. George Heriot established himself as a goldsmith in Edinburgh and rose from freeman to deacon of the Edinburgh Incorporation of Goldsmiths in 1593. An Act of the Scottish Parliament referencing hallmarking was passed to regulate and guarantee precious metal purity in 1457. Perplexing, however, is that no surviving items of Heriot's work feature a maker's mark, and the 'three Scottish jewels' (dated to the sixteenth century) feature no hallmarks, though they were created over a century after hallmarking



The Seton Necklace, part of a collar which originally belonged to the Seton family, is made from gold enamelled links set with pearls, rubies and garnets. Created in the late sixteenth or early seventeenth century, the piece is said to have been gifted by Mary Queen of Scots to her companion, Mary Seton, prior to the former's death in 1587.

was established. Lyndsay McGill, former curator of Renaissance and Early Modern History at NMS and the author of Chapter 5, concludes that "The life of an object is often layered with narratives and new research can reveal unknown stories… It is the journey that an object makes which creates the intrigue and the desire to know more" (McGill, 125).

The fully referenced essays embody academic rigour through the precise positioning of the historian/researcher role and the limitations to the interpretations made. Depending on the reader's interest, one can dip in and out of the essays or read in the intended order after the introduction. The authors are thorough, providing context and supporting evidence for any assertions. Indulgent writing techniques match the impeccable image placement to support the visualisation of how jewellery was commissioned, gifted and worn during the Renaissance era. Often, questions I had personally flagged while reading were addressed in detail a page or two later. The essays effectively raise mystery and intrigue. Kate Anderson – curator, Portraiture at the National Galleries of Scotland – questions the accuracy of painted accessories in chapter 6: Jewels in paintings could be exaggerated or wholly fabricated, much like some might use digital-editing tools today. In Chapter 7, Anna Groundwater includes one poem by Mary, Queen of Scots to Elizabeth I, and another by her son James IV and I to his wife Anna of Denmark. These offer insights into how Scottish royalty creatively perceived the attributes manifested in the precious pieces they would gift to their loved ones.

Areas for expansion might include providing or referring to an accessible royal family tree or timeline to help those who are unfamiliar with the lineage of the royal families. A brief outline of why hallmarking was not embedded within goldsmithing practices and what might have been considered typical jewellery for the main population to contrast just how opulent these jewels are. Lastly, an

The Fettercairn Jewel is a sixteenth century gold-and-enamel locket. The front (left) shows a rectangular almandine garnet, while the reverse (centre) shows an unusual scene featuring the Roman god Mercury. An associated X-ray image (right) reveals the design of the basse-taille (enamel) work. Photograph by Neil McLean; X-ray by Lore Troalen.

The Mary Queen of Scots Heart Jewel, comprising a sixteenth-century chalcedony cameo of the queen set in a nineteenth-century gold, enamel, ruby, onyx and diamond locket made in France.

outline of material provenance: an acknowledgment of working and trading conditions for extractive industries and makers at this time and place. It is fair to say that not all were living like goldsmith-turned-entrepreneur George Heriot, so an insight into the typical power dynamic between the trade and consumers would prove helpful.

Overall, this book succeeds in offering far more than a visit to the NMS Renaissance Gallery alone can provide. Inherently, there is physical distance between the viewer and these small, intricate jewels within the museum, and the detail shared in the descriptions is brief. *Decoding the Jewels* offers a wealth of expert perspectives on the Scottish Renaissance jewels on display within the gallery, while enhancing the visibility of detail through the enlarged photographs and object analysis. There is great value in showing how the NMS collections are connected with other artefacts to weave a broader understanding of the history of jewellery in and connected to Renaissance-era Scotland.

From 2020 to 2022, *The Galloway Hoard: Viking-Age Treasure* exhibition by NMS toured Scotland and offered an impressive technology-enhanced experience, including the ability to explore detailed 3D models of some exhibits from a smart device via QR code. There is currently no interactive element to the Renaissance Gallery exhibits. Instead, the book makes headway toward bridging the gap between the viewer and the historical artefacts. In particular, analytical scientist Lore Troalen is able to share detailed knowledge about material provenance and technique in Chapter 8 that is not currently presented in the gallery space. In short, reading the book is a helpful accompaniment to better understanding the works within the gallery, the broader context and surviving examples of Scottish Renaissance jewellery in other collections globally.

Second to sharing the messages and cultural or political implications of jewels in the NMS collection, *Decoding the Jewels* celebrates the acquisition of the Fettercairn Jewel through multiple essay contributions. There is some overlap between chapters, which helps relate the research across authors' expertise and provides familiarity in building an understanding of the recurring historical figures or jewels from another viewpoint. Each chapter offers distinctly different research insights.

I experienced great excitement in learning about how deeply rooted jewellery was in Renaissance Scotland, in demonstrating status and how the jewellery can be traced, passing through different royal or noble hands during their rise and fall from power. Jewellery was central to political campaigns at this time. The essays expose the subliminal or physically hidden messages to share with the trusted on a deeply personal level to build allegiance or family bonds. The narratives unravelling in paintings and poetry offered another way to view and value the functionality of jewellery at this time in history. Thankfully, these jewels survive to share firsthand political and personal drama from biased perspectives. I enjoyed this page-turning book in its entirety. ■

The Darnley Jewel (also known as the Lennox Jewel) uses Burmese rubies, Indian emerald, cobalt-blue glass, enamel and gold in its composition. It may have been commissioned by Lady Margaret Douglas for her husband — Matthew Stewart, Earl of Lennox and Regent of Scotland — either ca. 1564–1565, or after his death in 1571. Photo © Royal Collection Enterprises Limited 2024 | Royal Collection Trust.

> There is great value in showing how the NMS collections are connected with other artefacts to weave a broader understanding of the history of jewellery in and connected to Renaissance-era Scotland.

An open-access version of Decoding the Jewels: Renaissance Jewellery in Scotland *is available at* sidestone.com/books/decoding-the-jewels.

All images © National Museums Scotland unless otherwise specified.

Bringing SUSTAINABILITY *to the* JEWELLER'S BENCH

Susi Smither FGA JDT BSc outlines the ethical practices she brings to The Rock Hound's workshop.

The Rock Hound's Sunset Alchemy Cluster ring uses solid sterling silver, salvaged from medical X-rays, along with a nano-ceramic finish.

I am so proud to have my Alchemy Cluster ring grace the cover of this edition of *G&J*. Since earning my FGA back in 2011, I've fallen even deeper into the world of crystals and gems. A gem geek at heart – and The Rock Hound by name – I've been fascinated with replicating their natural crystal form in solid metal through the lost-wax casting process.

Using vulcanised rubber moulds, I am able to capture the fine details of the crystalline structure of a specimen. This is then carefully cut out, leaving a void into which molten wax can be injected. Once this is then sprued onto a casting tree and surrounded by investment, the wax can be melted out, creating the same void into which molten metal can be poured. Since the end material is opaque, either gold or silver, the eye is focused on those beautiful natural growth marks and crystallographic habit. This gives me the option of creating multiple pieces in a collection from the form of one crystal. Termination points become stud earrings, the outer triangle of a tourmaline becomes hoop earrings and a large cluster is kept whole to decadently be worn as a ring.

As I explained at COP28 when I was invited to speak on a panel about sustainable fashion, using gold and silver is inherently unsustainable, since these precious resources are excavated from Earth. Therefore, as a jeweller, I feel we have a duty of care to those who are affected by our choices, whether people or planet. Circularity is woven into our craft, and we diligently melt down our scrap; however, not all metals are truly recycled and unknown sources of newly mined materials can be mixed in. Always striving to have a positive impact, I'd been searching for a traceable source of recycled silver for some time. Thanks to the forward-thinking refining of Betts metals in the UK, I've started casting in NHS AgAIN silver.

> As a jeweller, I feel we have a duty of care to those who are affected by our choices, whether people or planet.

The Sliced Watermelong Tourmaline earrings by The Rock Hound features 18K Fairtrade red gold in their composition.

By taking waste X-rays from the National Health Service (NHS) that have gone past their necessary retention timeframe and preventing them from going to landfill, the fungible silver can be salvaged and, importantly, segregated whilst through the refining process. This creates a source of 100% traceable recycled silver. Taking waste from one sector and refining it back to be a brand-new usable material is true recycling, and I'm proud to say that I now only cast in this source of silver.

As a final flourish, I like to finish my pieces with a flash of nano-ceramic, which is a form of electroplating finally cured in an oven. This gives a transparent-coloured finish that reflects back the finished surface of the metal. In order to hone your craft, I believe you need to control the whole process, so I have been doing this work myself since 2019. Self taught, and through many hours of trial and error, I've developed a technique to bring two colours together in a perfect ombre, as seen in my Sunset Alchemy ring. This, combined with the 18K Fairmined Gold vermeil, creates bold and honest luxury without breaking the bank.

We will celebrate the ten-year anniversary of The Rock Hound next year. I am immensely proud to have been awarded Designer of the Year at this year's UK Jewellery Awards, as well as shortlisted in three other major awards in this year alone. My creative mind is always ticking, and I look forward to seeing where the next ten years take me. ■

Photos by Circe Hamilton, courtesy of the Rock Hound.

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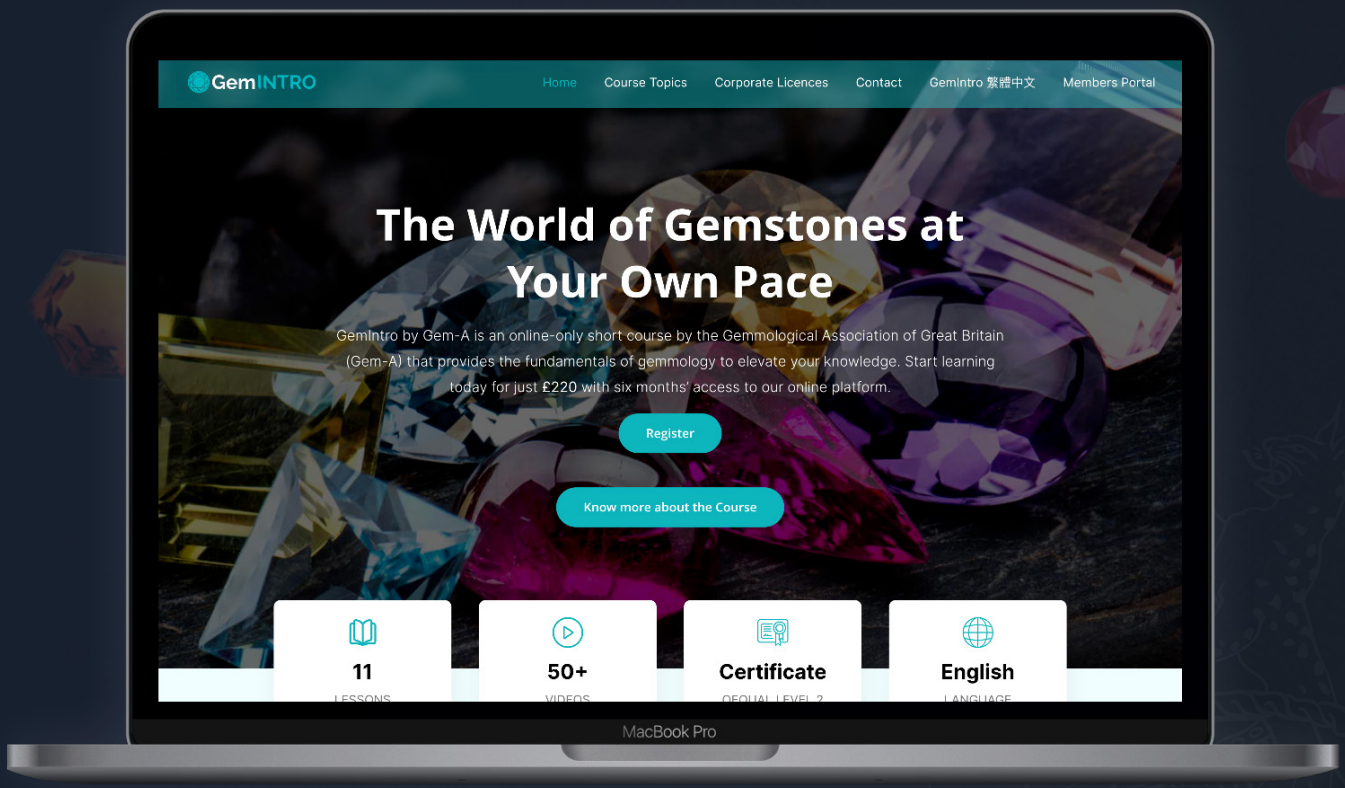

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