AUGUST 2022

***Malachite* Kingfisher seen along the Orange River near Aussenkehr**

DIARY

August	***6***	***10:00–14:00***	***Open to the Public Day – Rocks, gems, jewellery, mineral specimens to look at, chat about, swap, sell or buy.***
	13	***14.00–16.00***	***MEETING/ACTIVITY DAY – speaker to be announced shortly***
September	***3***	***10:00–14:00***	***Open to the Public Day – Rocks, gems, jewellery, mineral specimens to look at, chat about, swap, sell or buy.***
	10	***14.00–16.00***	***MEETING/ACTIVITY DAY - speaker to be announced shortly***

An Alluvial Diamond Mine on the Orange River

by Peter Rosewarne

Late in April 2022, I spent a couple of days at Norotshama Resort in Aussenkehr along the C13 on the Namibian side of the Orange River looking at birds, the geology, and just parking-off. On the first afternoon I was idly gazing across the flooded river from the bar deck when it dawned on me that I was looking at a vast alluvial *diamond* mining operation on the South African bank. What I had taken as being the riverbank was in fact an artificial bund of alluvium forming a berm the other side of which was the diamond mine. What I had also at first taken as being barren hills were in fact vast mounds of alluvial spoil material.

The site is shown on the *Google Earth* image in **Figure 1**.

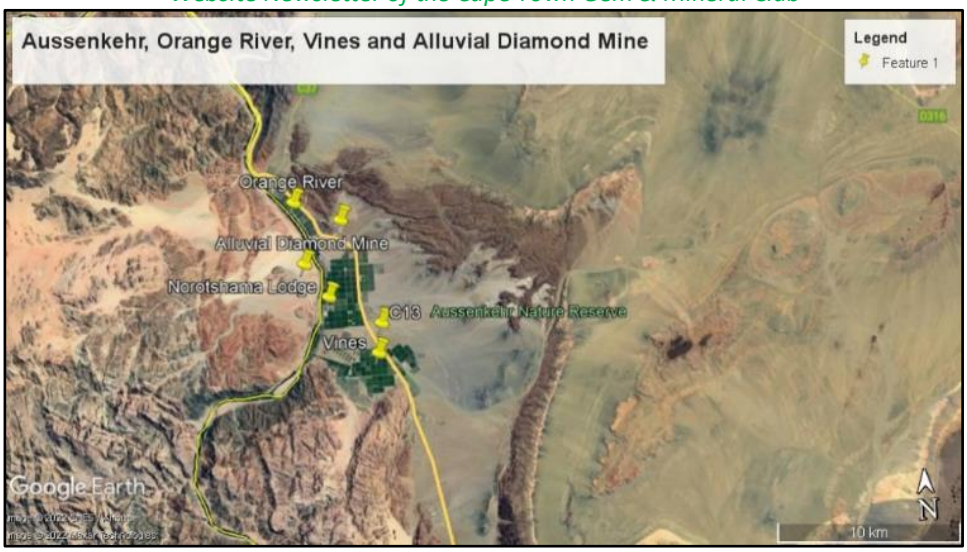

Figure 1: Google Earth Image

Figures 2 and **3** show the berm and the mounds of spoil material. And that's it; no facts and figures, as I couldn't find any information on this site on the internet. Does anyone have any information to add on this? So, it's just a short ramble after a fairly long drive but the N7 is in fine nick and there was hardly any traffic. The geological formations near the north-western edge of Aussenkehr are interesting and appear to consist of shale overlain by dolerite and with light-coloured wind-blown sand forming a nice contrast with the dark dolerite capping (**Figure 4**). Photograph taken from the pin above the word 'diamond' on the C13 on **Figure 1**.

The Orange River was in flood and some idle 'back of a cigarette packet' calculations while sipping a glass of wine indicated a possible c.130 million cubic metres of water per day flowing towards the Atlantic Ocean. That flow rate would fill all of Cape Town's seven major supply dams in about seven days. And with that useless piece of information, it's goodbye!

Figure 2: Berm and Mounds of Spoil

Figure 3: Detail of Berm and Spoil Mounds

<Figure 4: Dolerite Capping on Shale with Wind-Blown Sand

OK, one last shot of an aptly named, for this forum, *Malachite* Kingfisher, who patrolled the lake next to my chalet.

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Minerals in Art II

by

Peter Rosewarne


Imaged by Heritage Auctions, HA.com

Last month's Minerals in Art I article was fairly straightforward and just dealt with paintings of minerals. This month's Minerals in Art II is a bit less finite but basically covers the use of minerals to create art or *objets d'art*. It covers creations under the broad term *lapidary* but excludes jewellery.

Minerals have been used to create art for centuries, but the level of sophistication has been refined over the years to today's dazzling examples of the craft. The most popular minerals for carving/lapidary seem to include *lapis lazuli* (a rock not a mineral I know but please grant me some artistic licence), *sugilite* (from South Africa), *tiger's eye* (also from South Africa), *ruby zoisite* (Tanzania), *jade*, *quartz* (*rose quartz*, *rock crystal*, *amethyst*), *garnet* and *obsidian* (more artistic license). Many natural and polished minerals are used as bases, such as *quartz*, in massive form and as crystals, *tourmaline* and obsidian. Subjects range from birds to rodents, mammals, fish and plants to busts and *layer stone* cameos and engravings**.**


Imaged by Heritage Auctions, HA.com

The examples selected for inclusion here are no doubt influenced by my personal bias, but I've tried to select a varied range of subjects and minerals as well as the most visually appealing. Many are from the catalogue of past sales by Heritage Auctions, which gives interesting data on subject composition (minerals used), size and price.

We'll feature examples in the subject order mentioned above, starting with birds, which seem to be one of the most popular subjects for lapidary art, and I'm a keen birder, so here we go. As with the previous article, there is little in the way of text as the pictures do the talking and there is no attempt to describe lapidary techniques that might have been used. **Figure 1** kicks off with some local interest in that the tiger's eye of the eagle is from South Africa. It sold for $8 500 and is by Luis Alberto Quispe.

<Figure 1:

The parrots in **Figure 2** are carved from phantom-included *quartz* with *rhodonite* tails, *onyx* bills and *citrine* eyes, perched on a crystal of *rubellite*. Carved by Peter Muller and sold for $3 884. Personally, I'd happily knock them off their perch and claim that tourmaline crystal.

Figure 2: Parrots on Rubellite >


Imaged by Heritage Auctions, HA.com


Imaged by Heritage Auctions, HA.com

Figure 3 has lapis lazuli parakeets with *garnet* eyes and *carnelian* bills perched on a rock crystal group, also by Peter Muller and sold for $6 572.

< Figure 3: Parakeets on Rock Crystal

Moving on to rodents and mammals we have a *sugilite* (from South Africa) mouse in **Figure 4** and a contrasting one carved in *amethyst* by Patrick Dreher in **Figure 5**, a *labradorite* African elephant crafted in China in **Figure 6**, showing an attractive *schiller*[1] effect in this *labradorite* from Madagascar, giraffes fashioned from brecciated *rhyolite* (artistic licence claimed again) from Kenya in **Figure 7** and a pair of otters fashioned from *lapis lazuli* from Afghanistan in **Figure 8**.


Imaged by Heritage Auctions, HA.com

Figure 4: Sugilite Mouse

Figure 5: Amethyst Mouse

[1] Iridescence caused by reflection of light by microscopic lamellae

Figure 6: Labradorite African Elephant

Figure 7: Giraffes

Figure 8: Otters

Figure 9: Lapis Lazuli Carvings (author's collection)

Some mixed carvings next (**above right**), comprising mammals and an inanimate subject, an Easter Island statue, all carved from Chilean *lapis lazuli*, which tends to be a less vivid blue than that from Afghanistan (**Figure 8 above left**), as used for the otters and parakeets.

Our next category is fishy things, with an octopus carved from the unusual medium of *tektite*[2] from the Sahara, Libya in **Figure 10** and starfish and shells carved from *ruby zoisite* from Tanzania in **Figure 11**.

[2] Natural glass formed by meteorite strikes

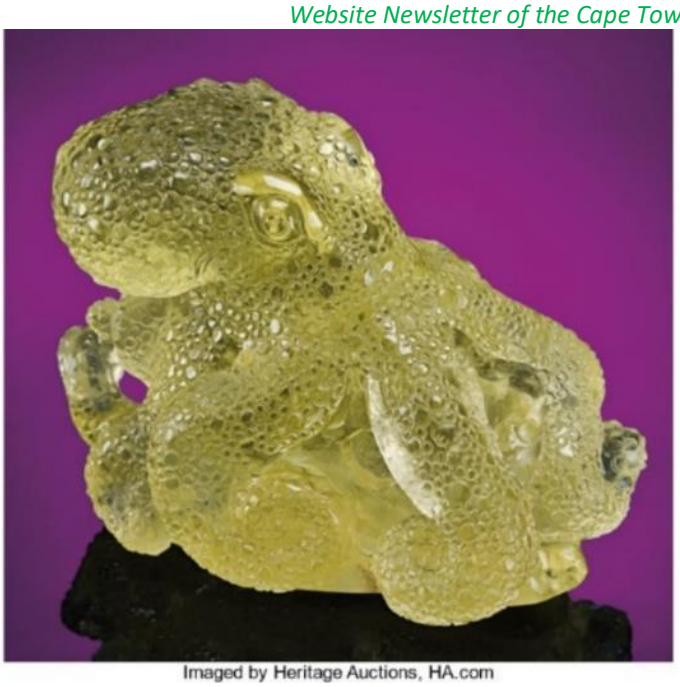


Figure 10: Octopus (7 x 6 x 4.5 cm)

Figure 11: Starfish and Shells

Slipping in an amphibian, **below,** we have what I assume is a toad given all those warts on it, carved from *citrine* by Patrick Dreher in **Figure 12**.

Above. Figure 12: Citrine Toad

Getting back closer to home, **Figure 13, right, is of Namibian aloes** fashioned from green *quartz*, *tiger's eye*, *picture stone*, *aragonite*, and *yellow agate* sitting on a base of *prehnite* and *quartz* from the Brandberg area of Namibia. It sold for $580.

Staying with a Namibian theme, **Figure 14a** (below left) shows a snail carved from *blue lace agate* (180 mm wide, 140 mm tall) with *quartz* antennae, by Jo Wicht. **Figures 14b and c** are also blue lace agate creations by Jo, the latter called *The Wave.*

In **Figure 15** we have a striking head carved by Jo out of a piece of *aragonite* from the Northern Cape near Vioolsdrift, which is 45 cm in height. It was modelled on a photograph of a child known then as "The Afghan Girl" in the National Geographic of June 1985. You can find out more about this enigmatic piece and its inspiration in Jo's article further below.

<Figure 15: Aragonite Bust: The Afghan Girl

An example of exquisite Chinese *jade* carving is shown in **Figure 16**.

Figure 16: Chinese Jade Carving>

Moving on we have cameos (almost jewellery…) fashioned from two-layer *agate* and *opal*, with a selection shown in **Figure 17**. I think these are also known as 'layer-stone' carvings.

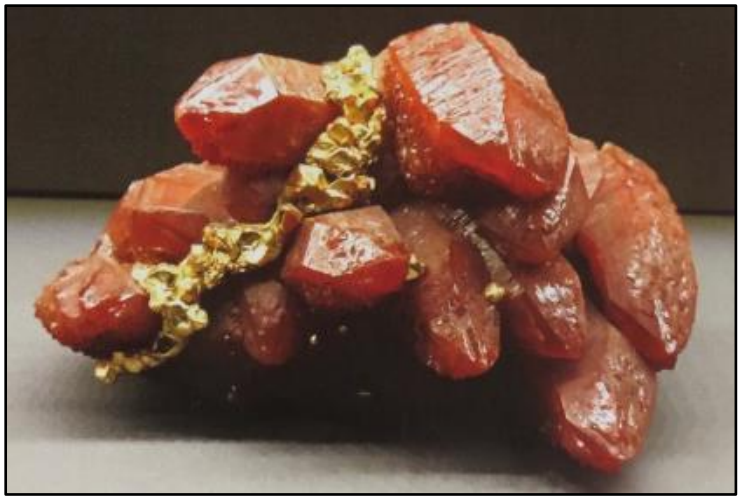
Figure 17: Examples of Agate and Opal Cameos

The lapidary buffs out there have no doubt heard of *intaglio*, but I certainly hadn't until stumbling upon it by accident. It's basically the opposite of a cameo and has a recessed picture instead of a raised one. An example of one in *garnet* is shown in **Figure 18**. These apparently became popular in the 18th century.

Figure 18: Garnet Intaglio

Almost last, but not least, we have a whacky exhibition of mineral art by the British artist Damien Hirst, who is apparently worth about £215 million, entitled, "Treasures from the Wreck of the Unbelievable," held in Venice in 2017. This exhibition featured artefacts supposedly recovered from the wreck and included many items featuring genuine mineral specimens with imitation overgrowths of native *gold* crystals and a series of *gold* nuggets. The raw materials, time and transport costs for the exhibition were apparently $50 million. Some of the *gold* specimens are shown in the figures below.

Figure 19 left: Showcase of Gold Nuggets (Damien Hirst, original photo Eric Wilson)
Figure 20: Quartz with Overgrowth of Gold Crystals (Damien Hirst, original photo by Eric Wilson)



<Figure 21: Hematic Quartz Crystals with Overgrowth of Gold Crystals (Damien Hirst, original photo by Eric Wilson)

To finish we have a chess set in **Figure 22** with pieces fashioned from Tanzanian *ruby* sitting on polished white *quartz* or *obsidian* bases with gold instruments, which perhaps is not art *per se* but is certainly a work of art. Created by Luis Alberto Quispe it sold for $50 000, which would certainly cheque-mate me 😊.

Figure 22: Chess Set and Some Pieces

Many thanks to Heritage Auctions, Jo Wicht and others for the use of their stunning images and creations.

References

Wilson, WE. (2018), ***Treasures from the Wreck of the Unbelievable: Artisan-crafted mineral specimens as works of art*****. The Mineralogical Record, July-August 2018. Tucson.**

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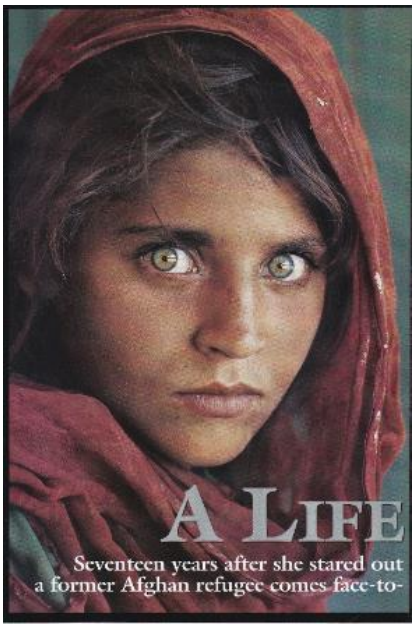
The Afghan Girl

Jo Wicht

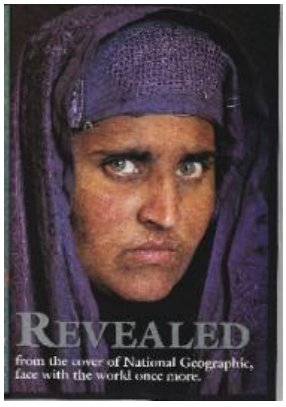
When I offered Peter Rosewarne the use of a photo for inclusion in his article "MINERALS IN ART – 2", that you have just read, he asked for more information on my carving and what the inspiration behind it was. I went back through my mental and visual records, and found much more of a story than I remembered…

Many years ago we asked Tammi Losper from George Swanson's yard in Springbok to get us some aragonite blocks from their mine in the mountains somewhere to the west of the N7 near Vioolsdrift. That area is part of the Nama Neint Nababeep plateau which is predominately limestone. Our club workshop was run then by Charlie Scharfetter and he wanted suitable stones for members to make into spheres. On our next visit North we collected his order and brought it home for coring. Much of the stone was still covered in clay and once this particular piece had been cleaned, it was apparent that it was mostly matrix rock with insufficient depth of aragonite for coring.

So the stone lay rejected in a corner of our backyard…….until one day in 2015 I turned it over, and imagined a face staring out at me. Does anyone else remember it? It has haunted me, ever since I saw it in the National Geographic of October 2013 in an article on "The Power of Photograpy" along with some iconic photos.



It turned out that this particular photo is one of those that once seen, is almost never forgotten. That 2013 photo was in turn a reprint from an NatGeog issue of June 1985, when Steve McCurry photographed this girl in a camp in Pakistan for a story on Afghan refugees. For seventeen years she was known only as "The Afghan Girl". When originally photographed, she was probably about 12, as from age 13 she would have gone into purdah and worn a burka.



And then in the National Geographic of April 2002 her face appeared again. This time Steve McCurry had returned to Pakistan to try and track her down. He too could not forget this face. After several false leads, he learnt that the girl, now married with three children, had returned to Afghanistan and lives in the mountains near Tora Bora. Her name is Sharbat Gula. Her life has been, and still is, very hard and she looks different from when she was a child, but as Steve McCurry says "*her eyes – then and now – burn with ferocity".* It is defintely the same person. Sharbat can remember the photos being taken, but had never seen the image of herself. So that is how the process of "releasing" my version of her began…

At left:
Work soon after the start, and nearly finished…

To the far left is a side/back view of the stone before I started working it, and at right how it looks now from the same angle. The arrangement of the aragonite "shawl" was just as you see in the finished work. The back of the aragonite stone was already smooth and just needed fine polishing. Aragonite is soft to work, and is what many of the plates and bowls of a stripey yellowish stone (these days called "onyx") are actually made of. True onyx is a type of chalcedony. Only the grey matrix of my stone needed some firm shaping for her lower jaw and neck, and her face had to be coaxed from the material available.

< A view from one side before work started, and the same view when finished

I carve with an angle grinder, and then polish with diamond pads on a hand-drill with a special adapter for 10 cm diameter diamond pads and their rubber backing. A flexible shaft Dremel/Foredom with small diamond tipped burrs carved the finer details. Water is also an essential part of my story, but it's best I don't elaborate on that.

About the time I carved this, I had learnt to facet and my first cut stone was a six-sided standard round brilliant in clear quartz. It was eminently suitable for an earring to give some sparkle to the creation – only one ear was visible, so there was no need to cut a matching stone! Finished weight was 18 kg, height 45 cm.

Once the Afghan lady was completed, I arranged to meet Thomas Midgely (him of the giant spheres). His factory drilled a vertical hole in the base of the statue's neck to insert a stainless-steel pivoting pin which in turn was set into the cream composite stone base which they made for me too. Cost to me for his work = a bottle of Irish whisky!

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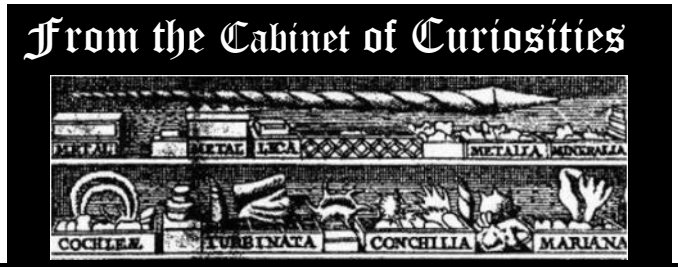

This month's curiosity is Nambulite, an exceedingly rare lithium-manganese silicate found at, for example, the Kombat Mine in Namibia and it is a tale of two specimens. Desmond Sacco has the best matrix specimen of Nambulite in his superb collection, with a 2.7 cm main crystal, (on the bottom left in the image below) but it has a gap where another crystal must have resided. A centrepiece of the Bill Pinch Collection, now in the Canadian Museum of Nature, is a 2.8 cm wide single crystal of Nambulite. Bill's wife said he was crazy for buying it for $10 000, and when he was offered $50 000 for it shortly thereafter, she also said he was crazy but this time for not selling it! According to the narrative in the Pinch Collection book, Des apparently thinks it likely that the single crystal would fill the gap on his matrix specimen. Will the two pieces ever meet? I am CURIOUS to know. **PR**

Left: The Desmond Sacco Matrix Specimen (copy of Bruce Cairncross image, with permission)
Right: The Bill Pinch Crystal (Michael Bainbridge image, with permission)

Describe your own original curiosity and send it to us with a photo.

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