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Blue Ruby®

By James Evans, FGA



'Blue Ruby'1

The 21st century has brought immense pressure for the jewellery industry: with greater competition from online retailers; with manufactured gems eroding margins; and with growing scrutiny of the industry's environmental impact. In this context, it is no surprise that trading rules are in the spotlight. This Bulletin considers three issues for gem marketing: colour varieties; trademarks; and manufactured vs natural gemstones.

Colour Varieties

Can a 'Ruby' be blue? Whilst the name 'Ruby' is nowadays reserved for red-coloured specimens of corundum, this wasn't always the case. Historically, a 'Ruby' could have been any one of numerous red gemstones. Those composed of corundum were nevertheless distinguished by their greater hardness and known as 'Oriental Rubies'. Similarly, blue gemstones were known as 'Sapphires' and blue corundums as 'Oriental Sapphires'. But visit a jeweller today and you'll find that, whilst 'Rubies' have remained red, 'Sapphires' can be bought in any other colour. To understand how this situation arose, we must return to the early days of mineralogy...

Back in 1728 John Woodward published his first attempt at gathering the gemstones into their mineral groups (according to their hardness).² He initially proposed just two categories of "Crystal Matter": 'Common Crystal' (quartz) and 'Adamantine Crystal' (diamond). In the following year, the mineral known today as corundum was admitted as a third category, for its hardness was intermediate between quartz and diamond. A sensible name for this third category would have been 'Oriental Crystal'. But Woodward opted instead for 'White Sapphire'. And from here it's not difficult to see how the name 'Oriental Topaz' was replaced by 'Yellow Sapphire'; how 'Oriental Amethyst' was replaced by 'Purple Sapphire'; and how 'Oriental Emerald' was replaced by 'Green Sapphire'. The one name that wasn't replaced was that of 'Oriental Ruby', which happened to be the most valuable gemstone of all!

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Seventy years later, the British scientist and politician Charles Greville presented to the Royal Society in support of Woodward's theory; that 'Oriental Ruby' and 'Oriental Sapphire' were one and the same material. But rather than naming the material 'White Sapphire', Greville used an Indian name for the mineral: corundum.

I saw, in Romé de L'Isle's collection, at Paris, a small gem, which was yellow, blue, and red, in distinct spots, and he called it Oriental ruby. Mr de La Métherie [...] calls it a sapphire; with more correctness, I think, the abovementioned gems should be classed as argillaceous [i.e. a clay mineral containing aluminium], under the denomination of Corundum.



'Red Ruby'1

(Greville, 1798, p.419)

From this point, the distinction between 'Ruby' and 'Sapphire' became scientifically obsolete, making the name 'Blue Ruby' equally as valid as 'Yellow Sapphire', and equally unlikely to mislead.

'Tanzanite' 1

Trademarks

In the Summer of 1967, a new gemstone was discovered in Northern Tanzania, by the foothills of Mount Kilimanjaro.³ The transparent blue crystals would soon be identified as a variety of zoisite. But if blue zoisite was to become a commercial success it would need a new name; one simultaneously more glamourous and less derivative. Thus, within a year of the gemstone's discovery, Tiffany's unveiled 'Tanzanite' to the world. This new name could have been trademarked. But to what end? Tiffany's had already secured exclusive rights to the gemstone. And even if they hadn't, it was in no-one's interest for a proliferation of alternative names to develop. And that's the major problem with trademarked gemstone names: it's hard to see the point!

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One notable example of a trademarked gemstone name relates to colour-change diaspore; a stone successively trademarked as both 'Zultanite' and 'Csarite'. With only one known source for the gemstone, the rationale for protecting its name is unclear. Perhaps the mine-owners wished to prevent artificial 'Zultanite' from entering the market. But if that were the case, the strategy seemingly failed. Or perhaps, in this case, the point was to attract investment for the gemstone's marketing without diluting the mining rights.



To be eligible for trademark protection a name must be distinctive (and not merely descriptive). Thus, the owners of the 'Royal Blue' trademark (*Perfect Luck Assets Limited*) would likely struggle to prevent its use as a description of 'Sapphire'. And the same is true for *Genuine Gems & Jewellery Co*; owners of 'Gold Sheen'.

Might I trademark the name 'Blue Ruby'?
As a matter of fact, I have! Although the term has been used in the past (Fourcroy, 1804, p.407), it is now sufficiently obscure to be considered distinctive. But might someone challenge the trademark on the grounds it is merely descriptive? Quite possibly.

'Golden Sheen Sapphire' 4

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Manufactured vs Natural Gemstones

At the end of the 19th century the jewellery industry was troubled by the appearance of 'Geneva Ruby' – a manufactured 'Ruby' that was large, transparent, and a beautiful "pigeon-blood" red (pictured).

From a scientific point of view, the 'Geneva Ruby' was as much a 'Ruby' as its natural counterpart. Indeed, early examples were marketed as 'reconstructed'; having been fused from fragments of natural stones. Nevertheless, the French Syndicate des Diamants et Pierres Precieuses soon declared that the unmodified term 'Ruby' should not apply to these gems (Kunz, 1888, p.138). Whilst the traditional description of such stones was 'scientific', the jewellery industry further reacted to the 'reconstructed' label by introducing a new norm that largely continues to this day: that manufactured gems should be labelled as 'synthetic'. 5 As Hermann Michel reflected in 1914, the rules of European trade were being set, not by scientists, but by industry:

Since it is precisely the scientific circles that have the slightest interest in how the artificial gemstones are to be named in the trade, the scientific point of view on this question can be pushed into the background. (Michel, 1914, pp.97-98).

An alternative approach would have seen existing stock distinguished with a label of 'Natural Ruby'. This is the direction the industry is now heading. With manufactured diamonds representing a growing share of total production, the US *Federal Trade Commission* agreed, in 2018, that manufactured diamonds were indeed diamonds (FTC, 2018, p.114). And, whilst it remains of the utmost importance that consumers

retailers specialising in manufactured gemstones no-longer attach an additional label to each and every item.



aren't deceived, it isn't difficult to imagine a next step; where

scientific gems
 reconstructed gems
 synthetic gems

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In summary, it is the rules on trademarks that impose the clearest restrictions on gemstone marketing. But these restrictions only apply to distinctive names. In contrast, the names used for colour varieties are least restrictive, for they reflect a merely incidental property of a stone. Sitting between these topics is the issue of manufactured gemstones; an issue that lied dormant through the 20th century but is poised to stir through the 21st.

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Notes

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¹ Image by Albert Russ.

² For further discussion of this topic, see the *Gemmology Bulletin* from Summer 2020.

³ In fact, two new gemstones were discovered in the same year, for the first gem-quality 'Tsavorite' was also discovered in 1967, in the mountains of the neighbouring region of Manyara (Brecken, 2017).

⁴ Image of 'Golden Sheen Sapphire' by Gemlover111 / Wikimedia Commons, used under Creative Commons licence CC BY-SA 4.0.

⁵ The term 'synthetic' is problematic, for it: suggests a false analogy with synthetic leather (a very different material to natural leather); and is frequently inaccurate. True synthesis involves the combination of simpler parts to produce a more complex compound. But in the case of corundum, alumina is typically both the starting material and the product, which is merely crystallised. In the case of diamond, the starting material is actually more complex than the product!