



Ornamental Stones and Gemstones: The limits of heritage stone designation: The case for and against Australian Precious Opal

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When the international designation of natural stone types was first mooted in 2007, stones that were utilised in building and construction were the primary focus of attention. However following public discussion it soon became apparent that sculptural stones, stone used for utilitarian purposes such as millstones, as well as archaeological materials including stones used by early man could all be positively assessed as a potential Global Heritage Stone Resource (GHSR).

Over the past 2 years it has been realised there is also a range of ornamental and semi-precious stones that may also be considered in the same international context. Examples in this respect include Imperial Porphyry sourced from Egypt that was much prized in the ancient world and “Derbyshire Blue John” a variety of fluorspar from central England that was used for vases, chalices, urns, candle sticks, jars, bowls door, jewellery and fire-place surrounds, especially in the 18th and 19th centuries. It is at this point that rock materials, sometimes used as gemstones, impinge on the domain of typical heritage stones.

In Australia, the gemstone most identifiable with the country is precious opal formed by sedimentary processes in the Great Artesian Basin. In this paper the question is asked whether “Australian Precious Opal” could be or should be considered as a heritage stone of international significance.

Immediately Australian Precious Opal satisfies several GHSR criteria including historic use for more than 50 years and wide-ranging utilisation for prestige jewellery around the world. It is also recognised as a cultural icon including association with national identity in Australia as it is legally defined as Australia’s “National Gemstone” as well as being the “Gemstone Emblem” for the State of South Australia. Opal continues to be mined. Designation of Australian Precious Opal as a Global Heritage Stone Resource would likely involve formal international recognition of Australian opal in the geological arena for the first time.

Arguments against the international designation of opal may be that the GHSR designation was meant primarily for building stone, not gemstones, even if it is possible to purchase tiles with embedded opal material. It may be argued that opal is also a mineral not a stone or rock however the precious quality of opal results from mineral impurities/ crystal irregularities and specimens of boulder Opal are best regarded as rock.

The decision on this matter is best based on whether designating precious opal will beneficially facilitate increased professional, community, national and international awareness of opal especially through scientific investigation, whilst also assisting marketing of opal as a commercial commodity. In addition, the real benefit of grouping opal in a designation that includes building stone needs to be considered?

It is likely that not all gemstones could beneficially be designated a heritage stone because the level of manufacturing or processing may be so great that most natural qualities of the material are lost. In addition, Australian opal should most likely be beneficially recognised in an “Australian Precious Opal Province” given the extent of regional opal variation in Australia coupled with the unusual sedimentary aspect of most occurrences.