Albert Memorial. Apr 2019. Prof John Cosgrove

Topic: Do we have any responsibility for public stone monuments? And if so, should we offer our services to other scientific or historical bodies?

John introduced this question using the famous Albert Memorial as an example of a building which had been threatened with demolition and which had considerable geological input in both its design and construction. It is after all, only a stone's throw from Imperial College!

Albert died of typhoid at the relatively young age of 42 in 1861 and Victoria was devastated. A committee was appointed by the Lord Mayor of London in Jan 1862 to raise funds for a design to be approved by the Queen, but there were lengthy negotiations with the government over the cost and it took over a year for a design by 1863 George Gilbert Scott to be approved.

Scott's gothic design was extravagantly ornate and stands 54m tall. It took 10 years to build, costing the equivalent of £10m today, most of which was met by public subscription. It was opened in 1872. It shelters a gilded bronze figure of Albert seated on a podium surrounded by a carved frieze in a type of Carrara marble depicting life-sized figures of artists from Homer to Mendelssohn, all of whom supposedly inspired the Prince Consort. The south face shows musicians and poets, the east side, painters, the north side, architects and the west side sculptors. The Prince is seated beneath a stone canopy from the roof of which rises an elaborate metal Spire (Fleche). In front of the four cluster pillars that support the canopy, stand the practical sciences (astronomy, chemistry, geology and geometry), while the four canopy niches above the pillars represent rhetoric, medicine, philosophy and physiology.

The canopy arches are carved from Portland limestone and highly embellished with gilding, semi-precious stones – agate, onyx, jasper, cornelian, and other crystals – enamel and polished granite. The four triangular gable ends contain Venetian glass mosaics depicting allegorical figures depicting the same arts as on the podium frieze

Half way up the fleche which rises from the canopy is a small tabernacle containing 8 gilded virtues. The four Christian virtues of faith, hope, charity and humility and the four Cardinal virtues of fortitude, prudence, justice and temperance. Above this are two tiers of Angels and the fleche is topped off with an ornately carved gilded cross. No wonder it took 10 years to build!

By its centenary in the late 1960s it was looking a little worse for wear. 100 years of weathering in the atmosphere of late 19th century and early 20th century London combined with war damage (the cross was blown off by our own anti-aircraft fire during WWII) had taken its toll. In addition, Victorian high gothic was not popular at the time when post-war optimism favoured clean lines in architecture. Furthermore, it was rumoured that Pevsner had described it as the worst building in the world. So, when in the early eighties a large piece of lead fell off the monument and it was clear that something had to be done, but there was a significant debate about whether it should be restored or not, especially as the cost would have to be borne by the Treasury.

Fortunately, the memorial was rescued and a thorough restoration was carried out in the late 1990s, including structural repairs (as a result of cracks in the lead allowed water to rust the underlying iron), cleaning, repainting and re-gilding, with further restoration taking place in 2006.

Geologically the memorial sits on the edge of the Taplow gravel river terrace, on a paved platform from which rises a pyramid of steps made of dark Irish Caledonian granodiorite. Each of the main cluster columns consist of nine columns. Four of red Ross of Mull granite, four of dark grey Irish granodiorite and a central column of Cornish Carnmanellis granite. The platform surrounding the memorial is paved using four different rocks types namely the Permo-Triassic ('New Red') Sandstone, buff coloured Darley Dale Sandstone, white Hopton Wood limestone of Carboniferous age from Derbyshire and the blue Early Cambrian slate from Charnwood Forest in Leicestershire.

There followed a lively and humorous discussion.

John Bennett