

# Pantheon college essay



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For many people, the world over, the Pantheon is just another stop on Rome's famous tourist trail. When considered amongst Rome's other architectural wonders, it is understandable that the significance of the Pantheon is sometimes overlooked. However, if one stops and takes a closer look it soon becomes evident that the Pantheon is an ancient building of immense significance, "inspiring much emulation, commendation, and some say even fear. 1 This essay shall analyze the Pantheon, paying particular attention to the construction details, mainly the entrance and dome, as well as the building's form and function. Although we do not know the identity of the Pantheon's architect, we can safely say that he was a perfectionist, and a genius.

The building, completed around 137 AD, was architecturally revolutionary and many years ahead of its time. The Pantheon's iconic feature, its 43.3-meter dome, was "unmatched for well over a millennium and not substantially surpassed until the adoption of steel and re-enforced concrete in the modern era. 2 It was influenced by the Roman bath structures at Baia, but of course no building belonging to this complex came close to matching the Pantheon in scale.

As anybody who has visited the Pantheon can confirm, its entrance is another of its awe-inspiring features. Originally five marble steps leading from the pavement to the porch marked the entrance, but due to a rise in land levels they are no longer visible and the pavement meets the porch. Prior to this change in level, the Pantheon "was set upon a traditional Roman architectural platform or podium. 3 At its porch, eight tall columns serve to support a triangular stone pediment, behind which are eight more

columns, all matching in design and size. These columns, constructed from grey Egyptian granite, are monoliths and all have Corinthian capitals and bases of white marble.

4 Simple wooden trusses carry the timber framing for the covering of the porch. It is a worthwhile observation that although the Pantheon's entrance has been in continuous use for two millennia, it has changed very little, especially when compared to London's Westminster Abbey, which is continuously altered. The Pantheon's entrance is so iconic and strong that it continues to influence the design of many buildings worldwide, most notably the government buildings of the United States and numerous banking headquarters, even houses. For many people the Pantheon is synonymous with ancient Rome, and for good reason too.

The design of the Pantheon is typically and uniquely Roman, with the great building's domed half sphere roof being one of its most recognizable features. The fact that the domed roof is an architectural feature associated with Rome was of great insult to the ancient Greeks, as they never quite mastered the art of dome building. The Romans, unlike the Greeks, realized that the secret to the construction of the dome is in the use of high quality cement. As Robert and Hutchinson explain, " Unlike simple mortar which is produced by adding water to a mixture of quicklime and sand, and sets when all the water has been evaporated into the atmosphere or obscured into the surrounding masonry, Roman pozzolana sets by combining chemically with water in the same way as modern Portland cement.

6 This combined with another Roman construction innovation, coffering, which was used to create lightness in the cement, made the dome possible. Having analyzed the Pantheon in terms of its unique and groundbreaking design, one question remains. What was the purpose of this fascinating building, to which such tireless design detailing, time and labour had been devoted? Over the years there have been countless theories as to the Pantheon's function. In 1923, Arturo Graf suggested that the Pantheon was dedicated solely to Saturn.

In 1989, Gian Giacomo Martines argued that its capola is a unique example of ideal geometry. 8 Another widely held belief is that the Pantheon functions as a solar temple and if true means that the function of the building most definitely affected its form. This is a particularly attractive explanation, especially as the oculus on top of the dome permits a dramatic shaft of sunlight to beam into the building. University of Otago's, Robert Hannah is one expert who subscribes to this theory. Based on his observations of the sun's interaction with the Pantheon, Hannah believes that the Pantheon may have been more than just a temple.

During the six months of winter, the light of the noon sun traces a path across the inside of the domed roof. Moreover, he claims “ during summer, with the sun higher in the sky, the shaft shines onto the lower walls and floor. At the two equinoxes, in March and September, the sunlight coming through the hole strikes the junction between the roof and wall, above the Pantheon's grand northern doorway. A grille above the door allows a sliver of light through to the front courtyard – the only moment of the year that it sees sunlight if its main doors are closed. ” 9 Perhaps this is a simple

coincidence, but Hannah reckons not. He points to the fact that in Roman times it was common for sundials to be in the form of hollowed out domes, albeit on a far smaller scale than the Pantheon.

Despite many convincing arguments, such as Hannah's, there is no definite and agreed consensus as to the function of Rome's Pantheon. As William MacDonald has written, " To say with any precision what the Pantheon meant to Hadrian and his contemporaries will never be possible. " 10 However, and as discussed in this essay, what all commentators agree on is the monumental impact the Pantheon has had on architecture. From its innovative dome and cement, to its entrance and beautiful granite columns, the Pantheon has had a truly revolutionary effect on architecture and construction techniques. For these innovations, and its unclear function, it is a powerful and enigmatic structure.