

- **The Moon is ancient and still preserves an early history (the first billion years) that must be common to all terrestrial planets.** The extensive record of meteorite craters on the Moon, when calibrated using absolute ages of rock samples, provides a key for unravelling time scales for the geologic evolution of Mercury, Venus, and Mars based on their individual crater records. Photogeologic interpretation of other planets is based largely on lessons learned from the Moon. Before Apollo, however, the origin of lunar impact craters was not fully understood and the origin of similar craters on Earth was highly debated.