EVANS R.E. (Manned Spacecraft Center, Houston, Texas 77058, USA), EL-BAZ F. (National Air and Space Museum, Smithsonian Institution, Washington, D.C., 20560, USA). Geologic Significance of Observations from Orbit on Apollo 17.

Visual observations from orbit allow repeated study of both large and small scale features from different viewing angles, and at varying solar illuminations. From observations made on Apollo 17, it is now possible to: 1) correlate the color of overflown lunar maria with compositions of sampled mare units; 2) characterize mantling units of widespread occurrence as to their nature, stratigraphic position, and probable origin; 3) distinguish between basalt-like mare surfaces and upland plains on the lunar farside; 4) explain structures with subtle characteristics that are ambiguous in photographs; and 5) correlate morphology with possible compositional variations of volcanic landforms. Observations and impressions from lunar orbit complement other remotely sensed data. They should be used in conjunction with photography to better understand lunar surface features and their mode of origin.