



Fig. 3. A portion of the Orientale basin, showing (top to bottom) inner mare, the corrugated and plains facies, and the domical facies of *Head* [1974] and *Church et al.* [1982]. A number of fissures are evident on the corrugated and plains units. Lunar Orbiter photograph LO IV-195H1; width of image is 270 km.

Mountains exceeds 9 km [*Head et al.*, 1981]. The strongest signature of thermal contraction postdating basin formation is likely to be concentrated in the central basin region. The topographic relief between the basin center and the foot of the

inner Rook Mountains about 180 km distant is nearly 4 km. In addition, the central basin region is floored by mare basalts up to perhaps 1 km in thickness [*Head*, 1974]. We regard the 5 km of relief from the base of central mare units to the foot of