Figure VII.15: Two solutions to the cracking problem. On the left, the subdivided $q_1$ and the original $q_2$ share a common, straight boundary. However, the lighting and shading calculations may cause the surface to be rendered discontinuously at the boundary. On the right, the patch $q_2$ has been subdivided in an ad hoc way to allow the common boundary to have the same points and normals with respect to both patches.