



FIGURE 4. PREDICTED RETINAL IMAGE of the Statue of Liberty when viewed at a distance of 3 km with (a) normal optics and a 3 mm diameter pupil; (b) corrected optics, 3-mm pupil; and (c) corrected optics and an 8 mm pupil. The statue subtends almost 0.9° —about the same as a US quarter at a distance of 5 ft. A narrow-band chromatic filter is placed in front of the viewer's eye to prevent ocular chromatic aberrations. Optical microfluctuations in the eye are ignored. The wave aberration used in the simulation is that of the author's eye (he has normal vision with spectacle correction). **d:** An enlargement of the image of c is overlaid with a hexagonally packed mosaic of circles that represent the foveal cone mosaic. This neural mosaic is relatively coarse compared to the retinal image, a phenomenon that may introduce artifacts into the neural image and ultimately cause a kind of misperception called aliasing. (Wave aberration measurement courtesy of Xin Hong and Larry Thibos, Indiana University.)