Peripheral vision has been studied quantitatively for over a century yet relatively little is
known about the far periphery. Ironically, many current textbooks give values of the lateral
extent that are too small, below 90°, even though correct values of around 110° (due to
refraction of the lateral rays) were reported by Hueck in 1840). Eccentricity dependencies for
visual performance measures like MAR, letter contrast sensitivity, critical crowding distance
etc. vary widely between functions but their study typically stops at the mid periphery, 60°
at most. Only studies from the perimetry tradition, like Zigler et al. (1930) or Collier (1931),
studied the full visual field for form vision. Yet with the introduction of intraocular lenses the
far periphery has regained interest because patients often experience strange shadows at
their visual field border, termed negative dysphotopsias. Here I review knowledge on
peripheral vision, on peripheral form recognition, and crowding, with an emphasis on large
eccentricities.

Teaser
Textbooks often state the extent of the visual field smaller than it really is. Here is a review
of knowledge on peripheral vision and on peripheral form recognition and crowding, with an
emphasis on large eccentricities.