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Thesis Title: Peripheral ocular monochromatic aberrations

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Citation:

Optical imperfections called aberrations affect image quality of the eye away from the line of sight as well as along it. In the first systematic investigation of peripheral aberrations, these were measured across the $42^\circ \times 32^\circ$ region of the central visual field in different subject groups. The magnitude and pattern across the visual field are altered by accommodation (focusing), myopia (short-sightedness), ageing, and refractive interventions of orthokeratology, laser surgery and intraocular lens implantation. Coma and spherical aberration were the most altered higher order aberrations. Coma was particularly affected by myopia and ageing, and spherical aberration was particularly affected by ageing, accommodation and intraocular lens implantation.