

Strasburger, Rentschler & Harvey (1991), *Perception & Psychophysics*

First in-depth paper on crowding after Andriessen & Bouma (1976), Levi et al. (1985), Atkinson et al. (1986)

Main messages for letter recognition:

- Introduction of the letter contrast threshold paradigm
- Dependence of contrast threshold on character size and eccentricity
- Letter contrast thresholds are higher than grating contrast thresholds and increase at a steeper rate with retinal eccentricity
- Failure of cortical magnification

Main messages for crowding:

- Extensive review of crowding research (connecting separate traditions)
- Origin of the term crowding (Ehlers)
- Introduction of the letter contrast threshold paradigm to crowding
- Measures critical flanker distance
- Resurrects Bouma's law which was mostly forgotten for two decades
- Resurrection of Korte (1923)
- Letter crowding depends on target eccentricity but not on letter size
- Whole-letter confusions / false localizations contribute to crowding
- Proposed that the limited resolution of spatial attention might underlie uncertainty about letter position in the crowding effect; discusses feature interaction

Highlighted reprint version:

www.hans.strasburger.de/reprints/pp_1991_contrast_thresholds_crowding_highlighted.pdf