



*Craik-O'Brien-Cornsweet Effect (COCE)* amounts to perception of a cusp in the luminance profile on a left as a small step in the brightness of the infield so the right part of the grey square looks brighter than the left part. However, if the cusp area is covered by black rectangular (bottom figure), both grey parts are perceived equiluminant as they actually are

This illusion can be considered as an evidence of filling-in process as signals on the boundary between two rectangular areas defined by luminance contrast get spread outward to produce a brightness-step percept.



By manipulating the luminance of the infield and luminance of the background as well as the parameters of the cusp it is possible to change or completely eliminate the effect.

In the demo example, by changing the stimulus profile via slider controls, the user can observe changes in the percept and compare it with the output of the filling-in process and thus can verify the ability of diffusion filling-in model to account for COCE