Visual Perception

Lecture 2

The traditional explanation of the Hermann grid outlined in the lecture fails to explain certain observations relating to this illusion. For example, rotating the grid by 45 degrees weakens the illusion significantly, but in the retinal explanation this should not matter, since retinal receptive fields are circular. Also, if we shrink the grid sufficiently, then, according to the retinal explanation, this should eventually make the junctions the same size as foveal receptive fields and thus cause dark spots to appear even where we are actually looking at the grid. But this doesn't happen.

Search the web and the AAU library (aab.aau.dk) for more evidence that refutes the classical explanation of the Hermann grid and find some alternative theories. A good place to start might be

http://web.mit.edu/bcs/schillerlab/research/A-Vision/A15-2.htm

Write a short review (1-2 pages of A4) of more up-to-date explanations of the Hermann grid effect.

Email your answer to David Meredith (dave@create.aau.dk) by 16.00 today.