Rick Born (rborn@hms.harvard.edu)

Due to the holiday on Monday (President's Day) there is only one lecture for this block with no assigned write-up. During the first part of the lecture, I will give an overview of the multiplicity of cortical visual areas with an emphasis on the question of why there might be so many. A lot of this part of the talk is based on the excellent paper by Horace Barlow (see below). I will work towards the idea that these areas represent highly specialized and abstract maps that are designed to facilitate rapid search. In the second half, I will focus on issues related to how this situation might have evolved. This will include a brief discussion of relevant developmental mechanisms as well as the introduction of concepts from evolutionary theory, such as the Baldwin Effect and genetic assimilation.

Prior to Wednesday's lecture, please read:

