Luke Palmer 2005-09-15 CSCI 3702

Moutoussis and Zeki: The relationship between cortical activation and perception investigated with invisible stimuli.

This paper described an experiment in which people were shown "inverse images" to each eye, so that the perceived image vanished. For instance, a green house on a red background in the left eye, and a red house on a green background in the right eye. The viewer conciously perceives a plain yellow plane. The experimentors measured brain activity while the subjects looked at this yellow "wall", and found that the same regions were active as when a subject was viewing the house conciously, but to a lesser degree.

One might conclude from this paper (as the experimentors implied) that conciousness is determined by the *level* of activity in the appropriate brain areas, since unconcious awareness of a house or a face resulted in the same active areas of the brain.

I personally wonder whether one could evoke emotions without concious input; that is, could you show a subject a picture of his wife, or a dying child, and make the subject feel a certain way but not understand why? Unfortunately, it would be difficult to perform an experiment of this nature, since it is difficult for subjects to objectively report on their emotions.