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**Patterns in nature shape human visual perception.**

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The statistical regularities of natural signals are known to shape the first stages of sensory processing. In the visual system, an efficient representation of light intensity begins in retina, where statistical redundancies are removed via spatiotemporal decorrelation. Much less is known, however, about the efficient representation of complex features in higher visual areas. I will discuss how the central visual system, operating with different goals and under different constraints, makes efficient use of resources to extract meaningful features from complex visual stimuli.