



Efficient coding explains the universal law of generalization in human perception

Chris R. Sims

Science **360** (6389), 652-656.
DOI: 10.1126/science.aag1118

Balancing costs and performance

Deciding whether a novel object is another instance of something already known or an example of something different is an easily solved problem. Empirical mapping of human performance across a wide range of domains has established an exponential relationship between the generalization gradient and interstimuli distance. Sims now shows that this relationship can be derived from a consideration of the costs of optimal information coding.

Science, this issue p. 652

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