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Spatio-chromatic cues in shape and material perception

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Background





What is the role of colour in mid-level vision?

What happens if you completely remove certain colour gradients?

Previous research provides hints that colour can enhance shape and material perception ^{1, 2, 3}



Summary

As expected, removing all value gradients had a major impact on gloss and shape perception.

Surprisingly, the effect of removing saturation is almost half as big as the effect of removing value gradients for both gloss (62.9%) and shape perception (42.7%).

The effects of removing the gradients depends on material of the object. There are many cases where if you completely remove one gradient there is little impact on perception, but removing the other gradient shows a big impact.

References

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