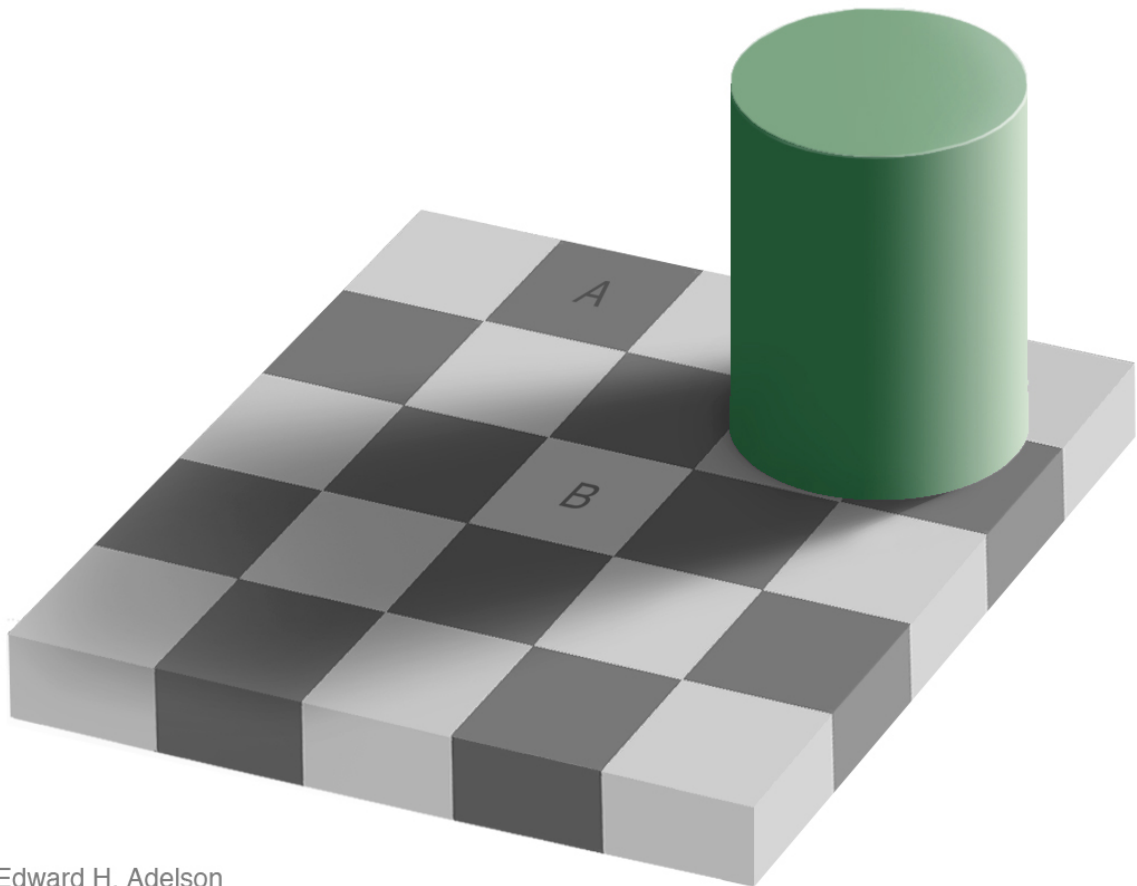


Mysteries of Photography #1: We see with our Brains, not with our Eyes

Obviously we need our eyes to detect the presence of light, just like a camera needs some light-sensitive material or device to capture an image. However, what we “see” is not like a digital RAW image file. It is much more like the JPG output where the image information is compressed and a heavily stylised. To illustrate this, look at this image:

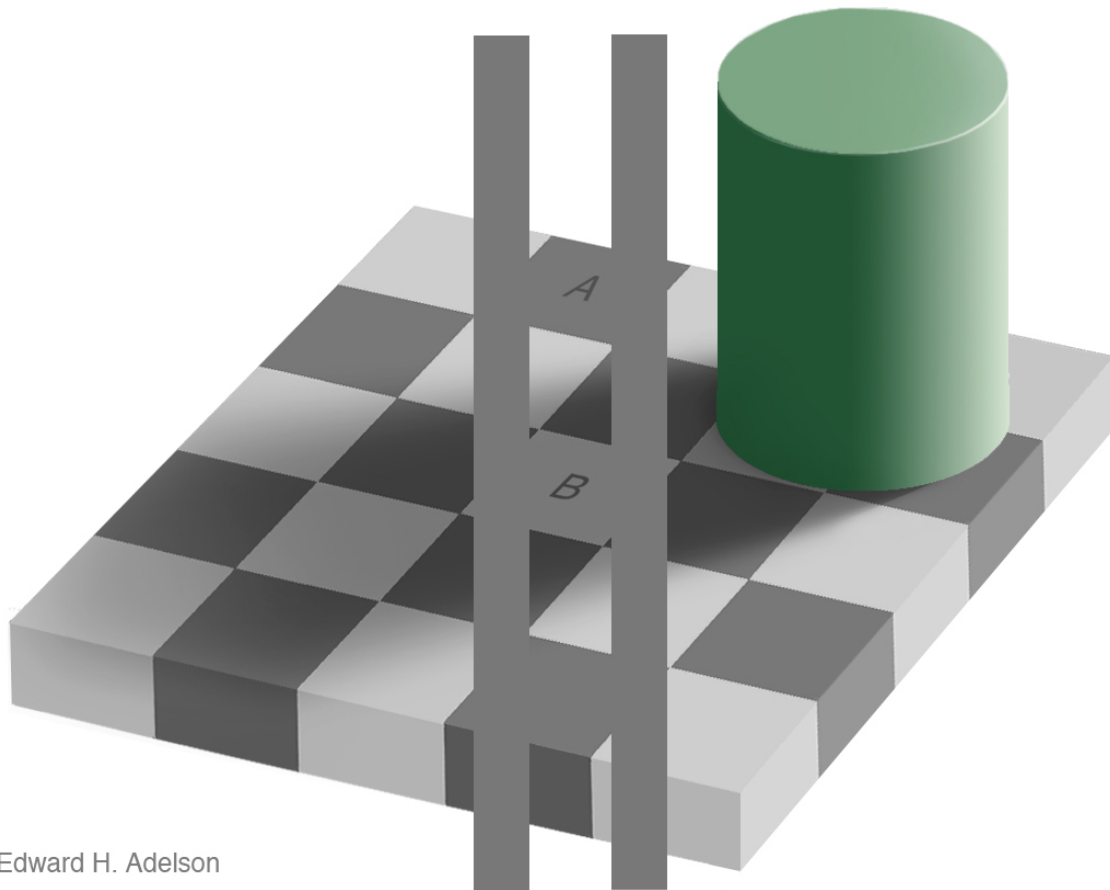


Edward H. Adelson

Look at the squares labelled A and B. Different shades of grey, right? B is a light square on the checkerboard and A is a dark square. Obvious isn't it?

Why am I showing you this?

Now look at the next image. Here two uniform vertical stripes in the same shade as A have been superimposed on the image. If you open it in any good image editing programme, you can cut out a bar and confirm that it is indeed a uniform grey.



Edward H. Adelson

Look at A and confirm they are the same shade as it. Now look down. They are the same shade as B.

A and B are identical shades of grey even though we would all swear on the proverbial stack of bibles that they are different.

Impossible? Is it a trick? No.

As the title says, we see with our brains, not with our eyes.

We have to acknowledge Edward H. Adelson for the amazing illustrations.

David Woodcock

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