Supporting Online Material:
Vividness of mental imagery: individual variability can be measured objectively
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Our main text demonstrates that individual variability in visual imagery correlates with
visual cortex activity and performance a novel color naming task. Here we present the
questionnaire used and compare our finding to a recent, related finding in the literature on
synesthesia.

VIVIDNESS OF VISUAL IMAGERY QUESTIONNAIRE (VVIQ) adapted from Marks, 1973.

Instructions:
Visual imagery refers to the ability to visualize, that is, the ability to form mental
pictures, or to ‘see in the mind’s eye’. Marked individual differences have been found in
the strength and clarity of reported visual imagery and these differences are of
considerable psychological interest.

The aim of this test is to determine the vividness of your visual imagery. The items of the
test will possibly bring certain images to your mind. You are asked to rate the vividness
of each image by reference to the 5-point scale given below. For example, if your image
is "vague and dim" then give it a rating of 4. After each item write the appropriate
number in the box provided. The first box is for an image obtained with your eyes open
and the second box is for an image obtained with your eyes closed. Before you turn to the
items on the next page, familiarize yourself with the different categories on the rating
scale. Throughout the test, refer to the rating scale when judging the vividness of each
image. Try to do each item separately, independent of how you may have done other
items.
Complete all items for images obtained with the eyes open and then return to the beginning of the questionnaire and rate the image obtained for each item with your eyes closed. Try and give your ‘eyes closed’ rating independently of the ‘eyes open’ rating. The two ratings for a given item may not in all cases be the same.

Rating Scale

The image aroused by an item might be:
Perfectly clear and as vivid as normal vision rating 1
Clear and reasonably vivid rating 2
Moderately clear and vivid rating 3
Vague and dim rating 4
No image at all, you only "know" that you are thinking of an object rating 5

In answering items 1 to 4, think of some relative or friend whom you frequently see (but who is not with you at present) and consider carefully the picture that comes before your mind’s eye.

1. The exact contour of face, head, shoulders and body.
2. Characteristic poses of head, attitudes of body etc.
3. The precise carriage, length of step, etc. in walking.
4. The different colors worn in some familiar clothes.

Visualize the rising sun. Consider carefully the picture that comes before your mind’s eye.

5. The sun is rising above the horizon into a hazy sky.
6. The sky clears and surrounds the sun with blueness.
7. Clouds. A storm blows up, with flashes of lightening.
8. A rainbow appears.

Think of the front of a shop which you often go to. Consider the picture that comes before your mind’s eye.

9. The overall appearance of the shop from the opposite side of the road.
10. A window display including colors, shape and details of individual items for sale.
11. You are near the entrance. The color, shape and details of the door.
12. You enter the shop and go to the counter. The counter assistant serves you. Money changes hands.
Finally, think of a country scene which involves trees, mountains and a lake. Consider the picture that comes before your mind’s eye.

13 The contours of the landscape.

14 The color and shape of the trees.

15 The color and shape of the lake.

16 A strong wind blows on the tree and on the lake causing waves.