

Each series of trials was made for each colour; in the one case commencing at faintest illumination and going down towards lowest intensity; in the other commencing with the lowest and approaching the highest illumination.

It should be remarked at the outset that some observers begin with the prejudice that it is impossible to judge the intensity irrespective of the colour. It cannot be denied that the presence of colour does make the judgment more uncertain—often very considerably—but with practice this uncertainty is much lessened. We therefore found it valuable to make first a large number of practice-experiments in a constant intensity of illumination (daylight), to accustom the observer to the colour, and to make exact statements. We used the comparison method. The series of observations made by Professor Kirschmann were the only ones obtained by the unconscious method.

We also found that the mean variation for blue was considerably greater. One would have thought that this would invalidate his statement about yellow, where he says that the mean variation for yellow is also especially great, and accounts for such a variation by the fact that yellow is much brighter than the other colours, and that the discriminative sensibility follows the law of Weber. With regard to the blue, however, he accounted for the greater inaccuracy by attributing it to the circumstance that the trials with that colour being made first, the observers had not yet sufficient practice; he refers also to other disturbing influences. With the blue we found that markedly there was no disproportion of intensity with the decrease of the illumination; on the contrary in most cases the number of degrees was highest in the faint illumination.

In the colour with which we experimented the mean variation was markedly the highest in lowest intensities. This was to be expected, owing to the increased difficulty of seeing the colour in the dark. In the first trials there were frequently

This may be correct for perfectly transparent bodies, regular transmission as in the case of glasses or laminae, smoked glass, etc. but it can never be correct for bodies of irregular transmission, as with paper, opal glasses, milk glass, etc. or for col. etc. when a certain percentage of light is lost through reflection from the front surface as well as from a certain depth.

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