was constant through a series of trials, was given, by the position of *l2*, the intensity which the same colour had as seen through the diaphragm. It is easily possible by adjusting the lamps to arrange the intensities in such a manner that the ground colour and the transmitted colour form one uniform surface. It may be remarked that we succeeded in getting the two colours to look so exactly alike, that, although there is a distance of about two feet between the two surfaces, the observer at the end of the tube could not possibly detect the slightest deviation from a uniformly coloured surface, no matter what was the aperture of the diaphragm revealing the transmitted colour. And, indeed, before each series of trials this impossibility of distinguishing the surfaces was made the criterion for the correctness of the intensity of the ground colour.

We next come to the method of procedure. The room was darkened and the observer placed himself at the end of tube T where he saw first the ground colour only, illuminated as described. Then by turning the micrometer handle there was made to appear in the centre one of the other twelve colours. This colour appeared first as a little spot. As it increased and rose above the characteristic space threshold[1] the observer stated whether the combination was pleasant, and whether it became more or less pleasant with the change in the comparative proportions of the two components: for as the transmitted colour increased the ground colour decreased until finally only a small border of it was left. The observer, who had now seen all the possible relations in size of the two components, was asked to decide if the combination on the whole was very pleasant, pleasant, indifferent, or unpleasant. This was not

[1] Miss Baker calls the qualities obtained by the above described method "spectrally pure," meaning thereby that a limited region of the spectrum is selected without admixture of light from other regions. I regard this as the only correct way of using the term "spectrally pure," which admits of degrees. If by a "pure" spectrum is understood a spectrum which has at every point light of *one* wave-length only, then a "pure" spectrum is impossible, as I have shown elsewhere. And even if such a spectrum could be obtained it would be absolutely impossible to produce one of its colour-qualities homogeneously on a surface. Much of what has hitherto been said and is generally accepted with reference to the "purity of spectral colours" owes its prestige to errors of thought, concealed behind abstruse terms and complicated formulas.—*A. Kirschmann.*

See Dr. Lane's article.