

in this series of curves will show this difference. Consequently the α -curves are of relatively much less significance.

Curve 13 is a combination of all the curves. A represents that each of the colours below as ground colour was combined with all the others, and is therefore formed from the sums of the horizontal columns of Tables I and III respectively. B indicates that each of the colours below as transmitted colour was combined with all the others, and is therefore formed from the sums of the vertical columns of Tables I and III respectively. C represents a combination of α and β and is formed from Tables II and IV respectively, the ordinates corresponding to the sums which stand at the hypotenuse of the triangle.

In comparing these curves with those of the former experiments, we find the same general characteristics in spite of the great difference in the conditions. It must be noticed, however, that these characteristics cannot here be expected to be as marked as in the former case, since we now have only half the number of colours. In all those curves for orange and yellow we find the same broad, plateau-like shape. We find, too, that like those with which we are comparing them, these curves do not reach to so great a height as those expressing the other qualities. In many of the other curves we can trace a striking similarity with the curves of the former series, but it must not be forgotten that it would never be possible to trace all the prominences in these, on account of the smaller number of qualities, nor that the changed space conditions alone would prevent a complete analogy.

It is interesting to notice the difference in the maximum when the colour is the ground colour (α) and when it is the transmitted colour (β). In the curves for the "pleasant" in no case do these coincide except in that of green, where the maximum in both cases is as red. In the "most pleasant," however, there is a coincidence in the cases of red, green, blue, and violet-purple.

In this series of experiments as in the former it was not known until after the experiments were completed which of the colours used, if any, were complementary. It will be remembered that, in order to have each colour as free as possible from