

saturated colour. The so-called broken colours, however, are nothing else than colours in diminished saturation and sometimes perhaps with changed light intensity. In other words, for practical purposes we seldom have to deal with fully saturated colours, but usually with shades and tints. Further, not only the qualities of the chromatic series are used for aesthetic purposes but also colourless light in its many variations of intensity. It is just the combinations of colourless light on the one side and the colours in their different saturation-degrees on the other which we have made the subject of an investigation, the results of which are unfolded in the following pages. These experiments were carried on during the academic terms of 1901, 1902 and 1903 in the psychological laboratory of the University of Toronto under the direction of Professor Kirschmann.

The Prang colours in full saturation which Miss Baker used, and also the second shades and second tints of the same, were employed in these experiments. The room and apparatus were the same as those used by Miss Baker and described in her first article. As representatives of the achromatic light the five greys of the Prang standard colour papers and the white and black of the Milton Bradley educational papers were used. They thus formed a series of seven intensities of uncoloured light. Unfortunately we can not claim that the intervals between them are of equal value. The distance between the darkest Prang grey and the Milton Bradley black seems to be greater than that between that grey and the next brighter one, though this discrepancy is somewhat mitigated by the darker background of black velvet which made the black paper appear only as a dark grey. A similar discrepancy is found at the other end of the series, the interval between the white and lightest grey appearing to be greater than that between the greys themselves.

Our method was the same as that of Miss Baker, the so-called "method of selection in serial comparison." When the colours

<sup>1</sup> University of Toronto Studies, Psych. Series, vol. I, pp. 205 etc.