CHAPTER 5

CONCLUSION

From the previous results and discussion, it can be concluded that the numerical expression of the color perception of Thai observers is possible. The visual assessment from the opponent word pairs and the colorimetric value are derived to set the color perception equation base on CIE L*, C*, h color space. The empirical equations can be the tool for prediction the color perception of Thai group observers. In addition, from these empirical color perception equations, it is possible to calculate the color perception values which used for plotting the color perception map. The obtained diagrams will be useful for the communication of color perception.

It is found that the twelve color perception word pairs will be divided in to three groups, based on the color perception equation and correlation coefficients. In case of the color perception equations, the contribution of CIE L*, C*, h to each of the color perception values is investigated. Correlation analysis identifies for which word pairs show the greatest similarities and differences to each other. From these two investigations, it classifies the twelve color perception word pairs into three categories. The first group is described mainly by chroma. They are "Light-Dark", "Distinct-Vague", "Vivid-Sombre", "Dynamic-Passive", "Strinking-Subdued", "Transparent-Turbid" and "Gaudy-Pain". The second group is directly proportional to the lightness. They are "Soft-Hard", "Deep-Pale", "Heavy-Light" and "Strong-Weak". The third group consists of "Warm-Cool" alone which is dominated influence by hue.

The Suggestion

This thesis reveals the equations that represent Thai group of observers. In order to get the models, which describe the whole of Thai population, it should be investigated in a large amount of observers. Moreover, from the study, it is even interesting to carry out further research on the various conditions, for example, words, languages, observer age, observer education, observer region, sample materials, light sources and color order system. Therefore, the future research should be investigated in the above subjects. Furthermore, this study uses a 2 point method to analyse the visual assessment and the color perception map expresses only the contour of the color perception characteristic. For further research, to get more precisely result, more point method is recommended. In addition, the obtained data, if possible, should be transformed to represent on the monitor, as a real color. It is not only useful for color planing but also useful for color communication through network in the present time.

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย