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QUANTITATIVE ANALYSIS OF THAI SENSATION
ON COLOR COMBINATION



Mr. Pisut Srimork

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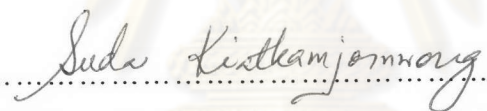
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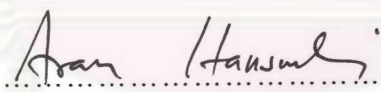
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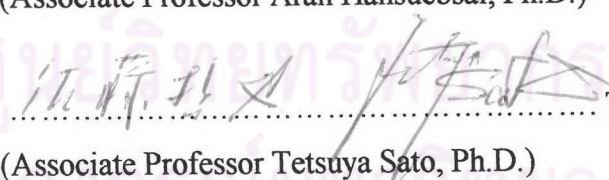
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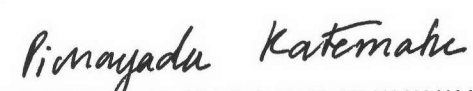
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การทดสอบความรู้สึกของคนไทยสำหรับการรวมคู่สี 253 คู่ ด้วยวิธีเชิงปริมาณของคำคู่ตรงกันข้ามแสดงความรู้สึก 14 คู่ แบ่งออกเป็น 7 ระดับ นำผลข้อมูลที่ได้ไปวิเคราะห์ด้วยวิธีทางสถิติและการวิเคราะห์ปัจจัย ได้ระดับคะแนนการประเมิน (visual score) ของแต่ละคำคู่ตรงข้ามแสดงความรู้สึกทั้ง 14 คู่ และสามารถแบ่งกลุ่มคำคู่ตรงข้ามแสดงอารมณ์สี 14 คู่ ออกเป็น 3 กลุ่มที่ขึ้นอยู่กับค่าความอิ่มตัวสี (chroma), ความสว่าง (lightness) และ สีต้น (hue) ได้ปริภูมิความรู้สึกสี 3 มิติเกิดขึ้น รวมทั้งความสัมพันธ์ระหว่างระดับความรู้สึกของการรวมคู่สีกับระดับความรู้สึกของสีเดี่ยว ได้สมการความรู้สึกต่อคู่สี 12 สมการ นำผลระดับคะแนนการประเมินที่ได้จากผู้สังเกตการณ์เปรียบเทียบกับค่าจากสมการ ได้ค่าสัมประสิทธิ์สหสัมพันธ์ของทั้ง 12 คู่อยู่ระหว่าง 0.74 ถึง 0.86 และยังพบอีกว่ามีความเป็นไปได้ที่ความรู้สึกสี “ไม่กลมกลืน-กลมกลืน” มีความสัมพันธ์กับคู่ความรู้สึกสี “ไม่ชอบ-ชอบ” ผ่านแบบจำลองที่อ้างอิงด้วยค่าความแตกต่างของสีต้น (ΔH^*) กับ ค่าความแตกต่างของความอิ่มตัวสี (ΔC^*)

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

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The color sensation of Thai observer was examined for 253 color stimuli made of two color combination by deriving the quantitative visual scale of fourteen opponent word pairs through the seven point method. The results were analyzed by the statistical method to obtain the visual score of all the opponent word pairs and three groups were categorized by the factor analysis method. Each group was influenced by chroma, lightness and hue and a three dimensional color sensation space was able to be created. The relationship of the color sensation between two color combinations and single colors was established to derive the twelve color combination equations. The correlation coefficient values were in the range of 0.74 to 0.86 when the visual scores from observers were compared with those values obtained from equation. In addition, it was shown that "Disharmony-Harmony" possibly relates to "Dislike-Like" color sensation through the model based on the hue difference and the chroma difference.

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Pisut Srimork

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จุฬาลงกรณ์มหาวิทยาลัย

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