Molecular Biomedical Informatics

Web Programming

網際網路程式設計
Color
配色
Though color is subjective, there are some conventions

You cannot complete a color scheme that everybody loves it, but you must make sure that nobody hates it

### Some observations

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most people like blue (male 57%, female 35%)</td>
<td>People associate blue to ocean, sky, peace, clean, comfortable, technical, authority, etc., which makes it usually be the most preferred color</td>
</tr>
<tr>
<td>Bright color (clear, 亮色)</td>
<td>Soft color (vague, 柔色)</td>
</tr>
<tr>
<td>Low Chroma such as gray (simple)</td>
<td>High Chroma (fancy)</td>
</tr>
<tr>
<td>Coarse-grained (粗心)</td>
<td>Fine-grained (細心)</td>
</tr>
</tbody>
</table>
Color model

- **RGB** (red/紅, green/綠, blue/藍)
  - for photos and videos
  - primary color of light
  - additive color model (加色法)

- **CMY** (cyan/青, magenta/洋紅, and yellow/黃) or CMYK (key/黑)
  - for printing
  - primary color of painting
  - subtractive color model

Color harmonies / 色彩調和

- Primary color / 原色, secondary color / 第二次色, tertiary color / 第三次色

- Monochromatic, complementary, split-complementary, analogous, accented analogic, triad, tetrad (double complementary), square
Other terminologies

- **HSB (HSV)**
  - hue/色相
  - saturation/飽和度
  - brightness (value) / 明度

- **Tint vs. shade**
  - 加白(淡) vs. 加黑(深)

- **Warm vs. cool**
  - 暖色系 vs. 冷色系

- **References**
  - [Simple, Practical Color Theory](#)
  - [Understanding and the Meaning of Color Within Design](#)
Now I know these theories, then?
Actually, you still need tools

- **Color schemer**
  - ColorBlender ⇐ if you are lazy
  - Color Scheme Designer
  - HSL Color Schemer

- **Society**
  - COLOURlovers
  - kuler

- **Misc.**
  - 0to255
  - Color Fields Colr Pickr ⇐ an interesting tool
  - Color Palette Generator

- There are much more.
  You may share tools and your thoughts.
Color schemes for web

- Instead of hue, saturation, etc., try to understand “the interactions between colors”
  - Notice that the meanings of colors are different in different cultures. For example, red means passion; dark red websites are usually noble; while red in light color websites indicates warning
  - Please put contrast as the first priority because of usability
  - Effective Color Contrast
  - Luminance to Choose A Palette

- Three must-reading articles
  - Color Theory for Designers, Part 1: The Meaning of Color
  - Color Theory For Designers, Part 2: Understanding Concepts And Terminology
  - Color Theory for Designer, Part 3: Creating Your Own Color Palettes
Even though, I still don’t know how to choose colors
My personal experience/practice

- Refer to others (for inspiration)
  - 10 Most Commonly Used Colors In Web Design And Their Examples
  - Color Scheme Inspiration – Spring
  - Color Inspiration: Go Green with Envy
  - Vector Art, Utilizing the Colors of the Seasons
  - Best Of Color Inspiration: 130+ Green Color Palettes
  - Color Inspiration from the Masters of Painting
  - an amazing color scheme from Mona Lisa (蒙娜麗莎)
  - Some Summer Color Lovin’ Inspiration
  - the origin of the color scheme of the website of this course
  - Web 2.0 Colour Palette
    - the origin of the color scheme of this slide

- If you see these materials, would you choose the same color schemes?
- See more websites, find those fit your imagination, and then… imitate (致敬)
- Use theories with tools to adjust the color scheme
  - new colors would be naturally generated
Reminding/提醒

Though color is subjective, do NOT too believe yourself along / 配色是很主观没错，但不要太相信自己一个人

Theories are just tools, not truth / 理论只是工具，而不是绝对

Watch more, cultivate your sense of beauty / 多看，多欣赏艺术，培养自己的审美观
Any Questions?
Today’s assignment
今天的任務
Re-color your site

- That’s it
- So I also choose this week to check your PIXNET app
- References
  - the three must-reading articles in Color schemes for web
  - the eight links in My personal experience/practice
  - 不需要美感的配色講座-顏色是可以用理論說明的-
  - 學學台灣文化色彩
- Your web site (http://merry.ee.ncku.edu.tw/~xxx/cur/, ex8) will be checked not before 23:59 11/25 (Sun). You may send a report (such as some important modifications) to me in case I did not notice your features.