Confocal Images and Visual Design

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Abstract:  
The laser scanning confocal microscope (LSCM) is developed from the conventional optical microscope, using a laser instead of a lamp for a light source. Confocal microscopy has several advantages over conventional optical microscopy, especially the capability to optically “section” thick specimens to get a clearer image. Specimens are labeled with one or more fluorescent probes to display distinct proteins, organelles, cells, or tissues. Some classic and non-classic visual design principles are reflected in these colorful confocal pictures, including repetition of certain elements, use of radiation, presentation of details, and application of light and shade. In the current paper, we discuss how confocal images convey these design principles by analyzing some representative pictures from confocal image competitions and give some examples of the application of these principles in visual design. Development of confocal technology opens another avenue for designers to find inspiration from nature and life, and re-construct their art works.

Keywords
- Laser scanning confocal microscope,
- Confocal microscopy,
- Visual Design,