Part II focuses on techniques that rely upon parsing the visual structure from an image to synthesize artwork. In most cases this is performed using a region segmentation algorithm (either automated or user assisted), or in some cases by fitting a model (e.g. of facial structure) to the source image. We also cover techniques for stylizing this region based representation of images. A diverse variety of stylization and shading techniques are included; from gradient diffusion, to packing algorithms for packing regions with paths, tiles, and other rendering primitives.

Region-based color sketch, painting and stained glass rendering. All were produced using segmentation based rendering algorithms described in Chap. 7. Courtesy of Fang Wen