# Experimenting with color based instead of intensity based gradient images

**Converted a color image to CIE XY chromaticity then calculated the polar angle of the CIE X, CIEY point with respect to an origin of (0.35, 0.35).**
**Histogram was made of the CIE XY theta (with number of bins = kColors which is 253 at most) and the populated bins were mapped to values 253 and descending. Then histogram equalization was performed. The result is a greyscale image formed using color segmentation.**
**The CannyEdgeFilter and the EdgeExtractor are then used to extract edges.**

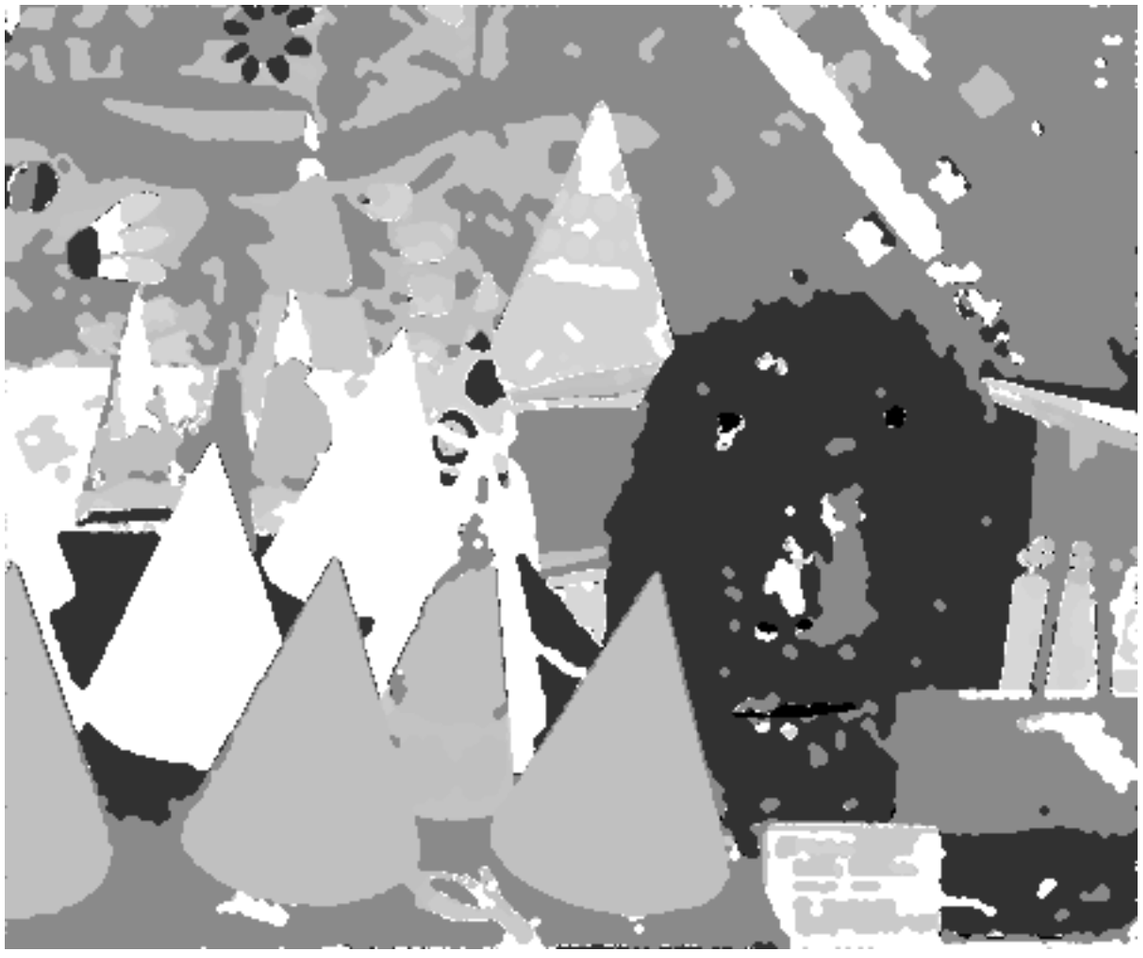
original color image


edges from **greyscale intensity**

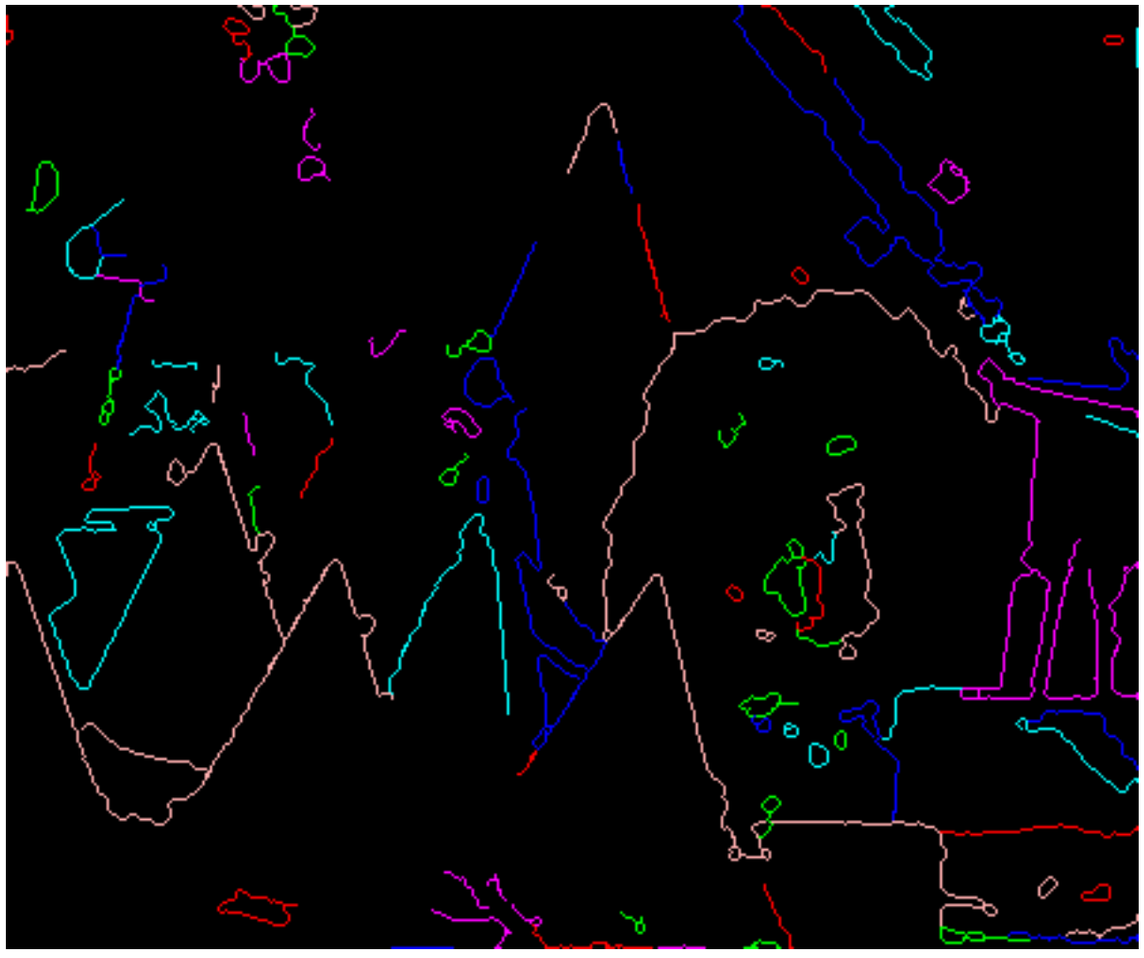
the color image is from the 2003 dataset in http://vision.middlebury.edu/stereo/data/scenes2003/

good for corners

color segmentation using kColors=8

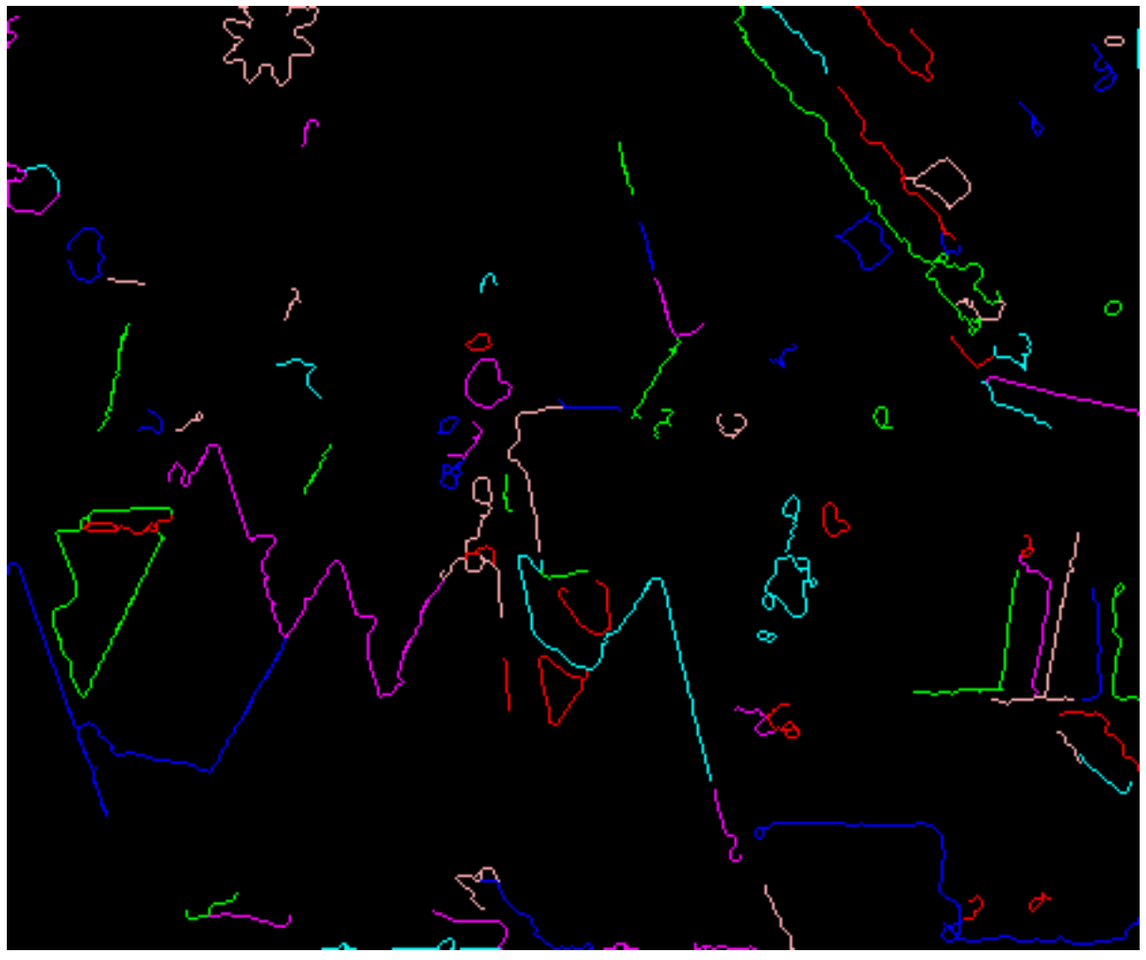


edges from **color segmentation**



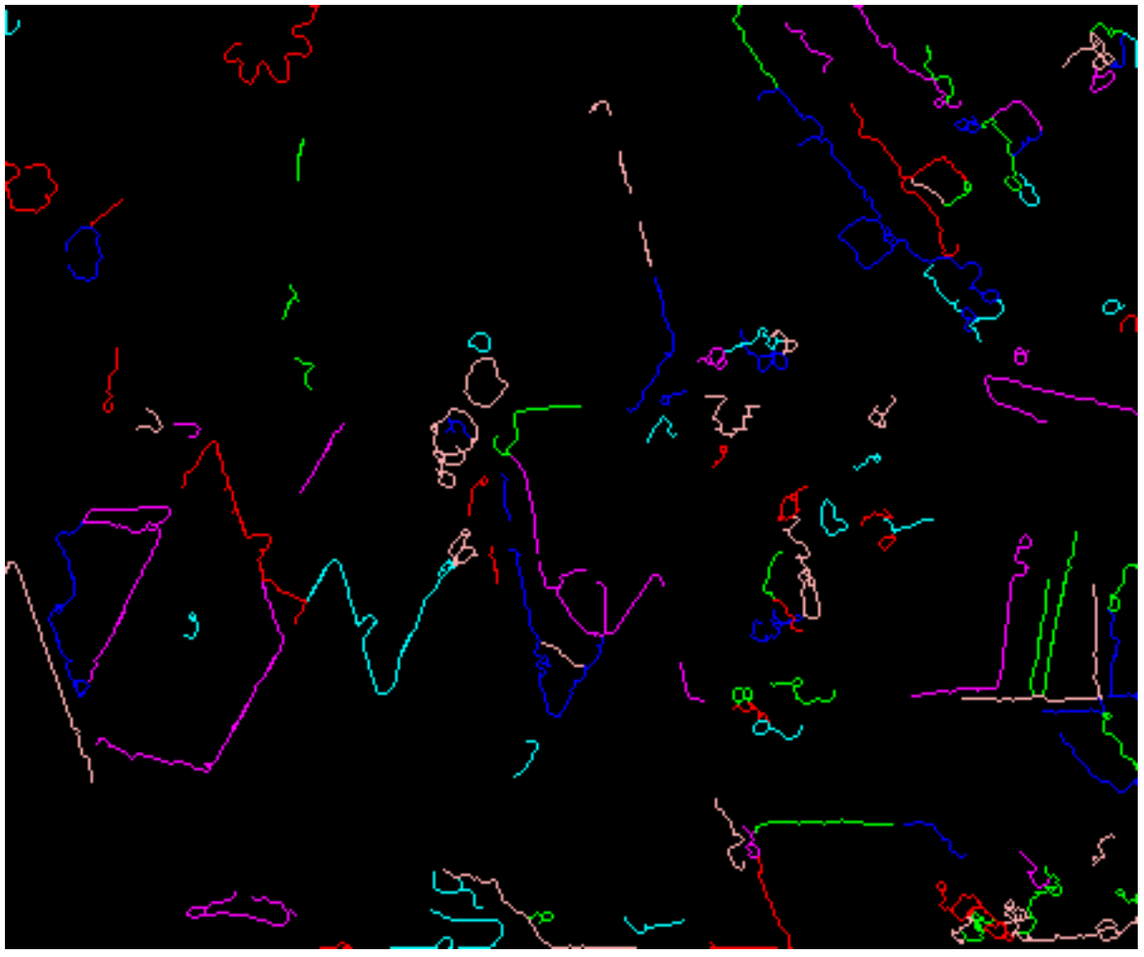
color segmentation using kColors=16

edges from **color segmentation**



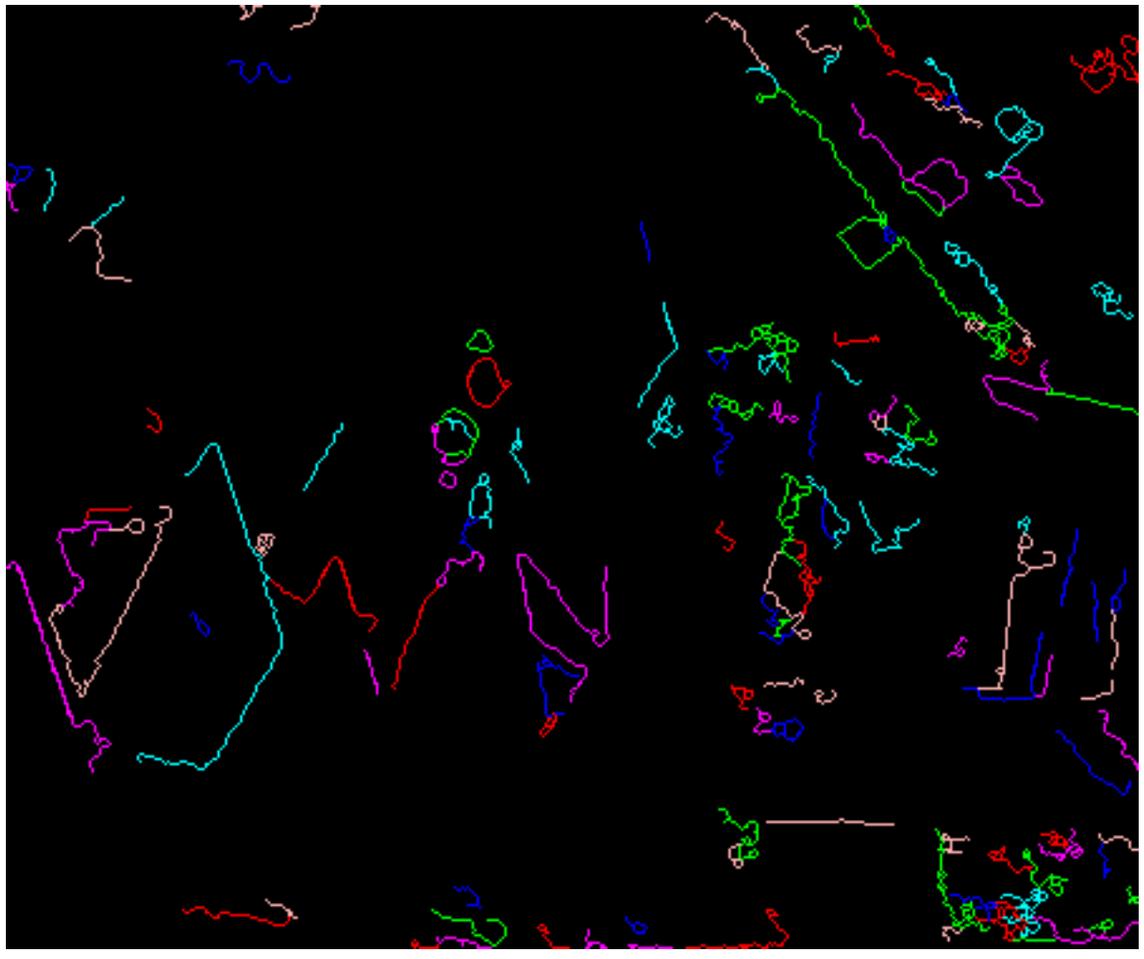
color segmentation using kColors=32

edges from **color segmentation**



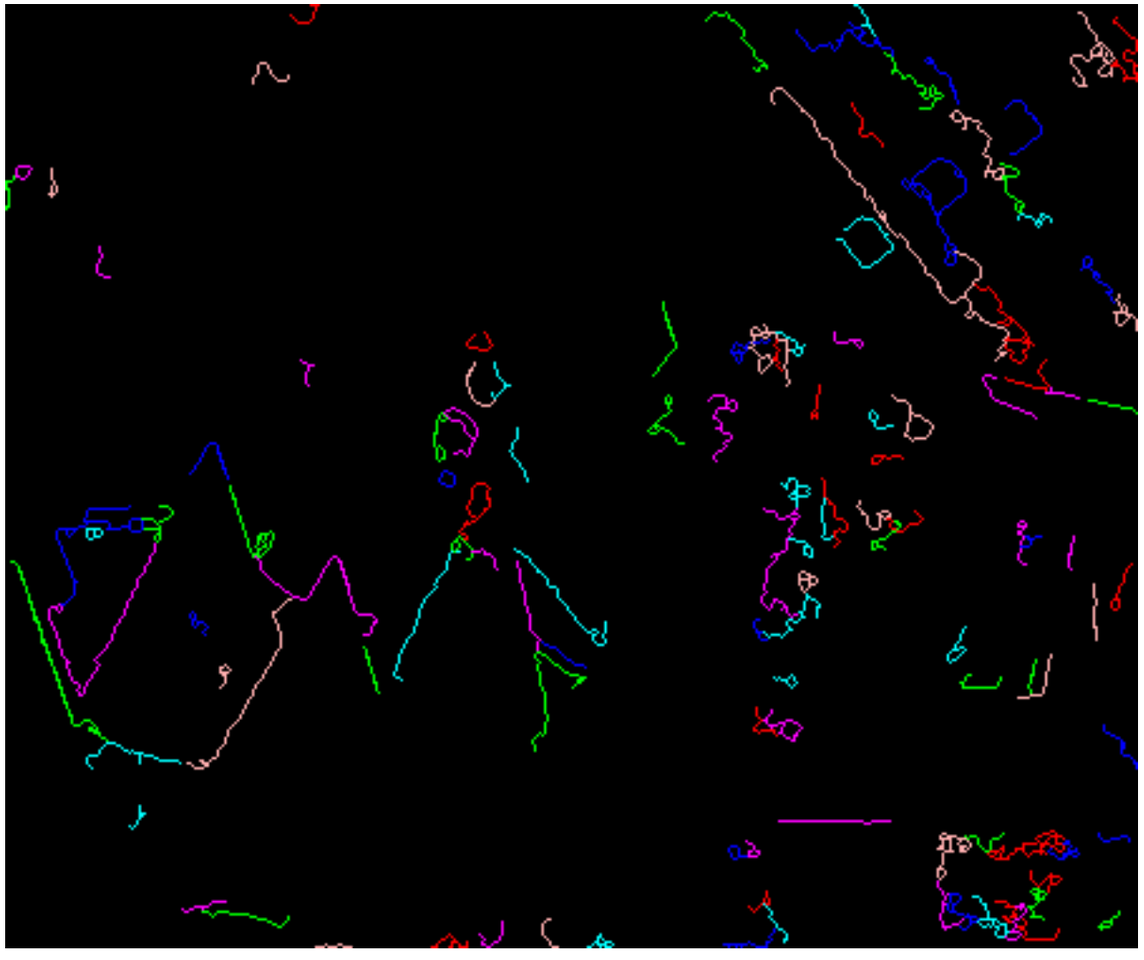
color segmentation using kColors=64

edges from **color segmentation**



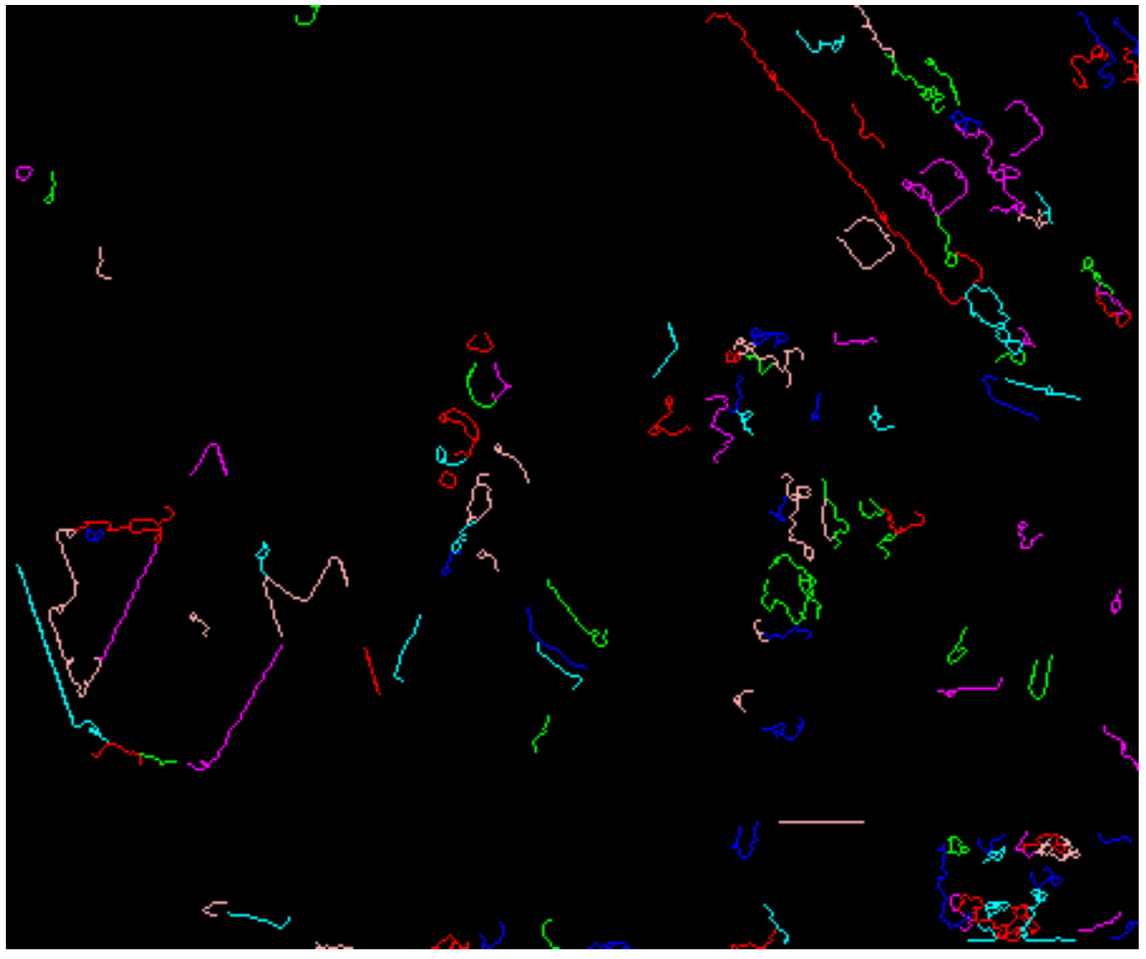
color segmentation using kColors=128

edges from **color segmentation**



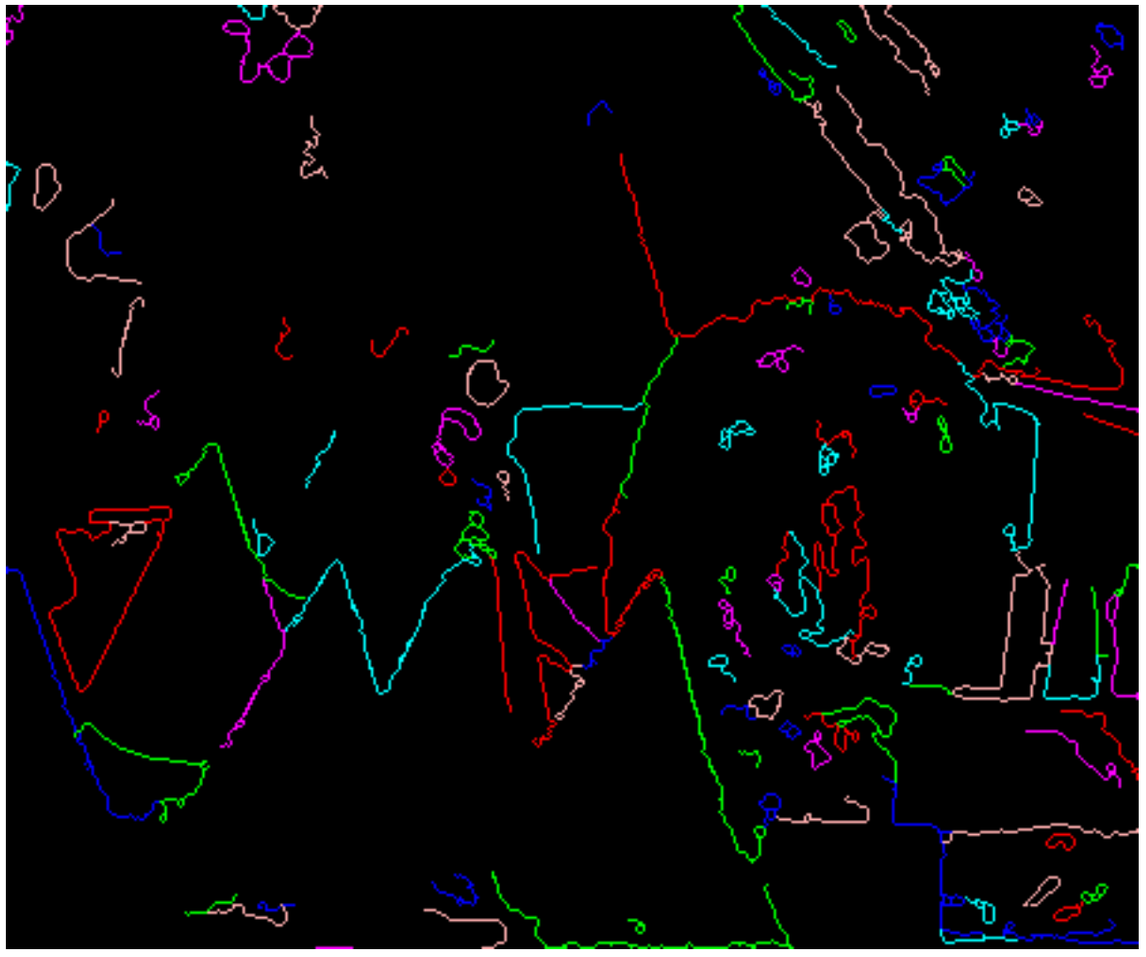
color segmentation using kColors=253

edges from **color segmentation**

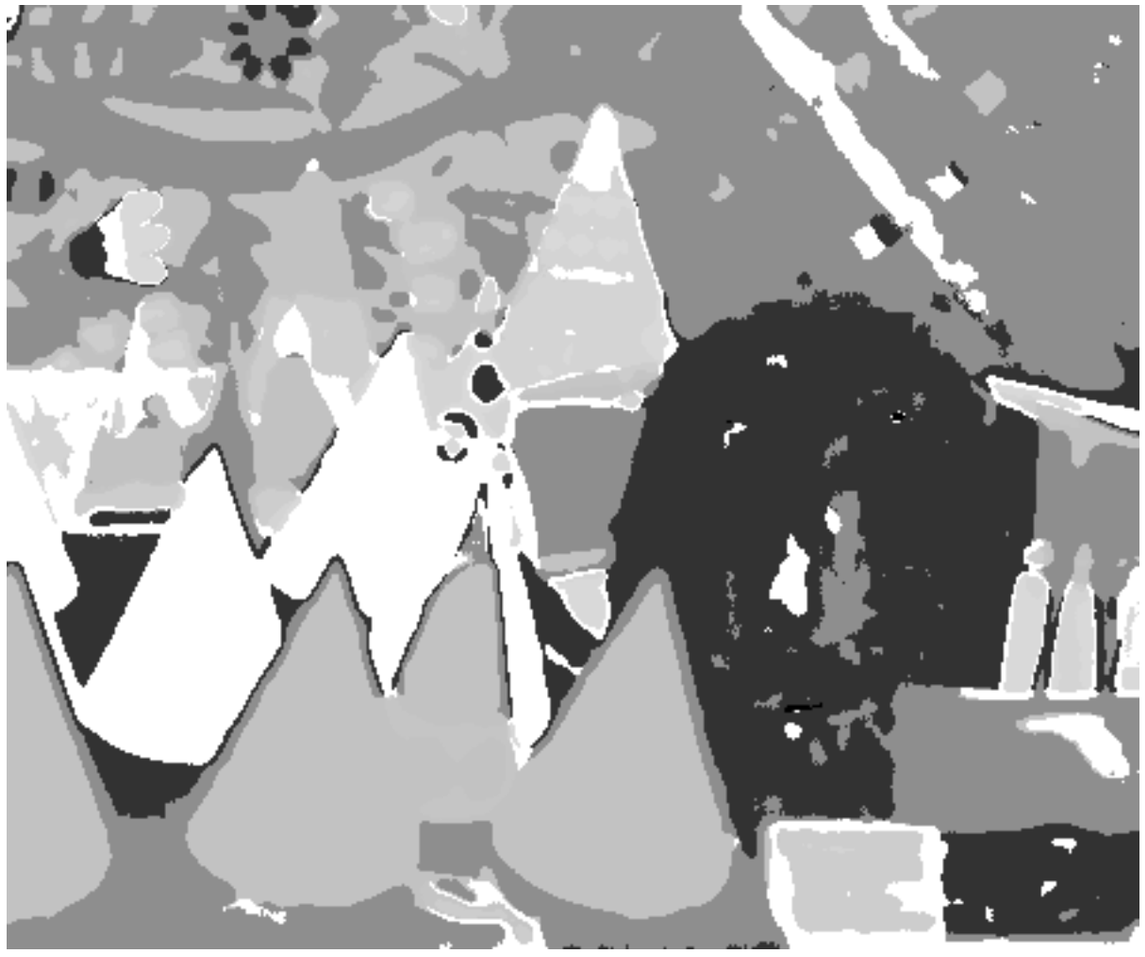


color segmentation using kColors=8 *& blur sigma=1*

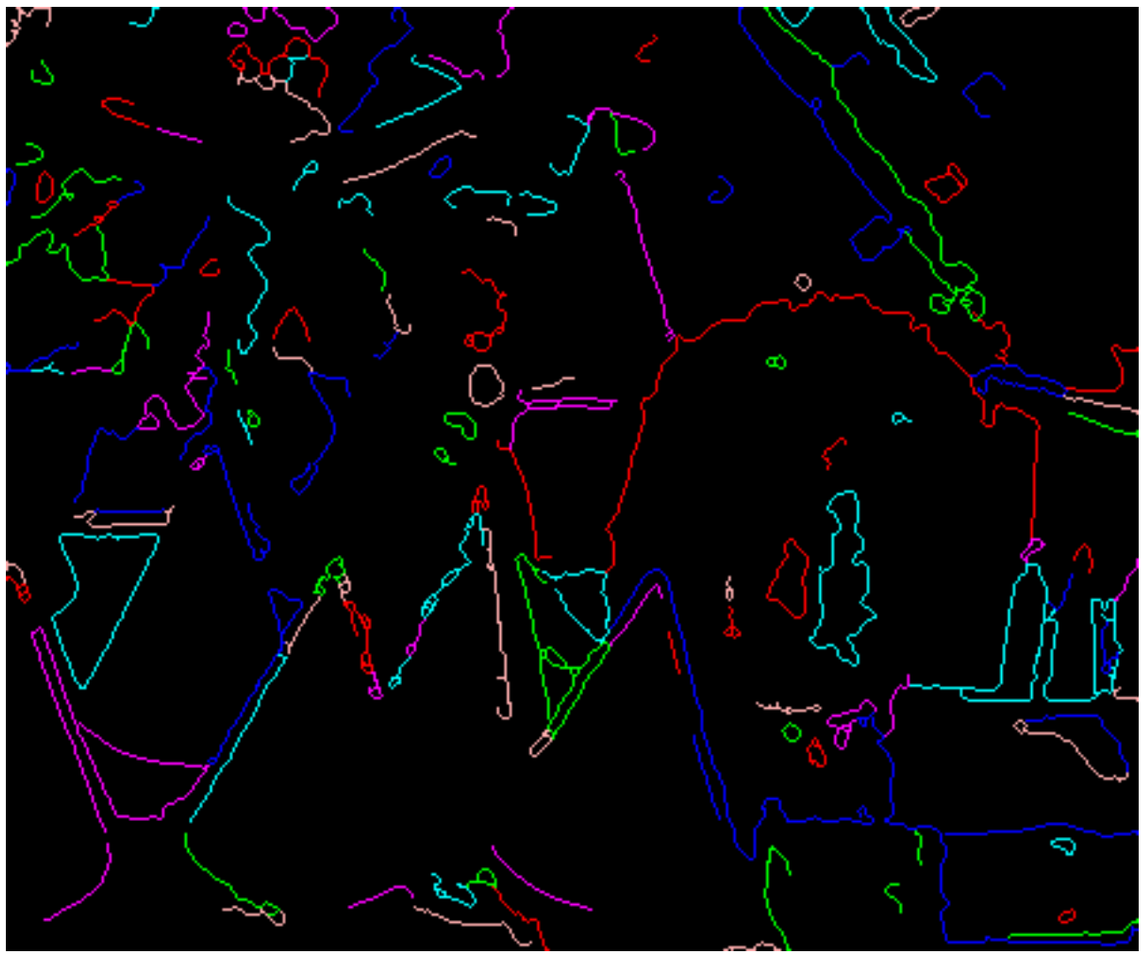
edges from **color segmentation**



color segmentation using kColors=8 *& blur sigma=2*

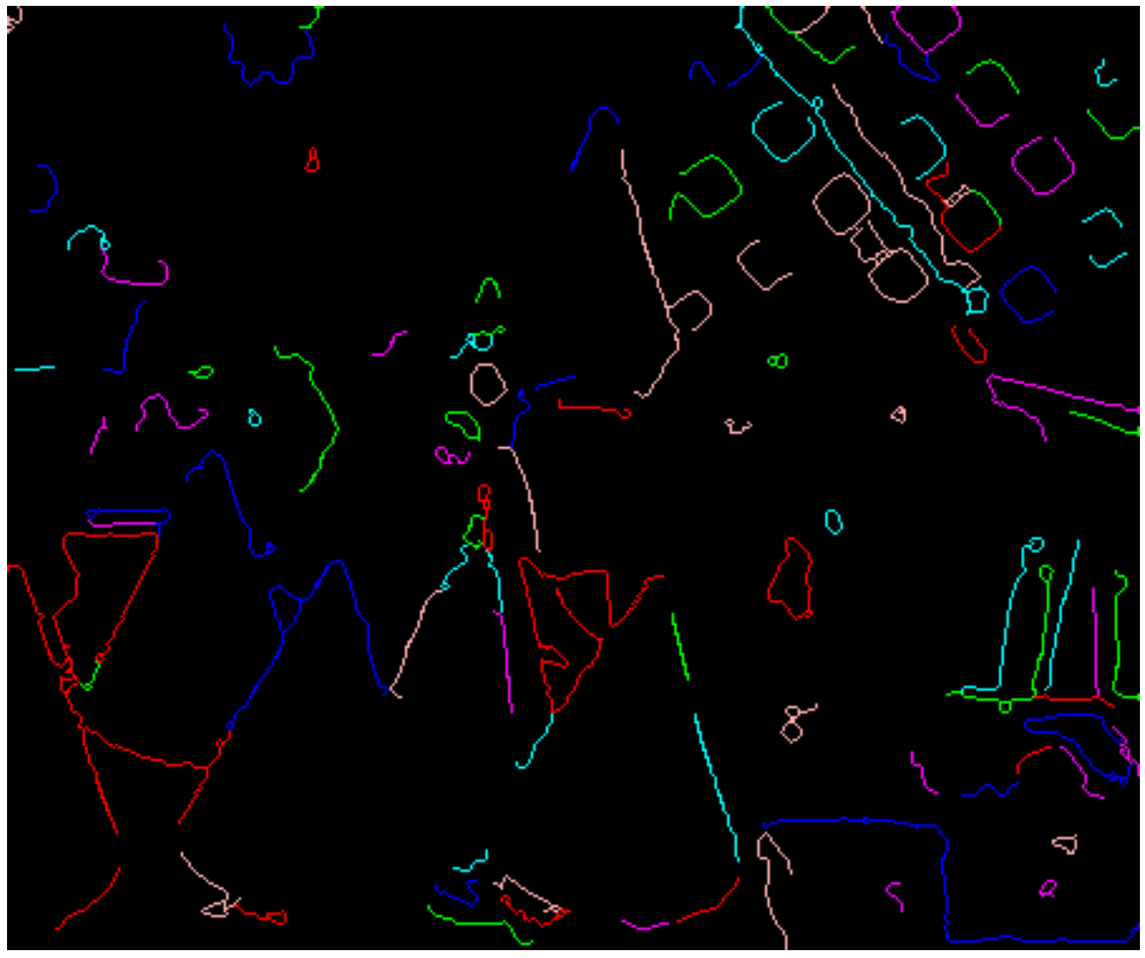


edges from **color segmentation**



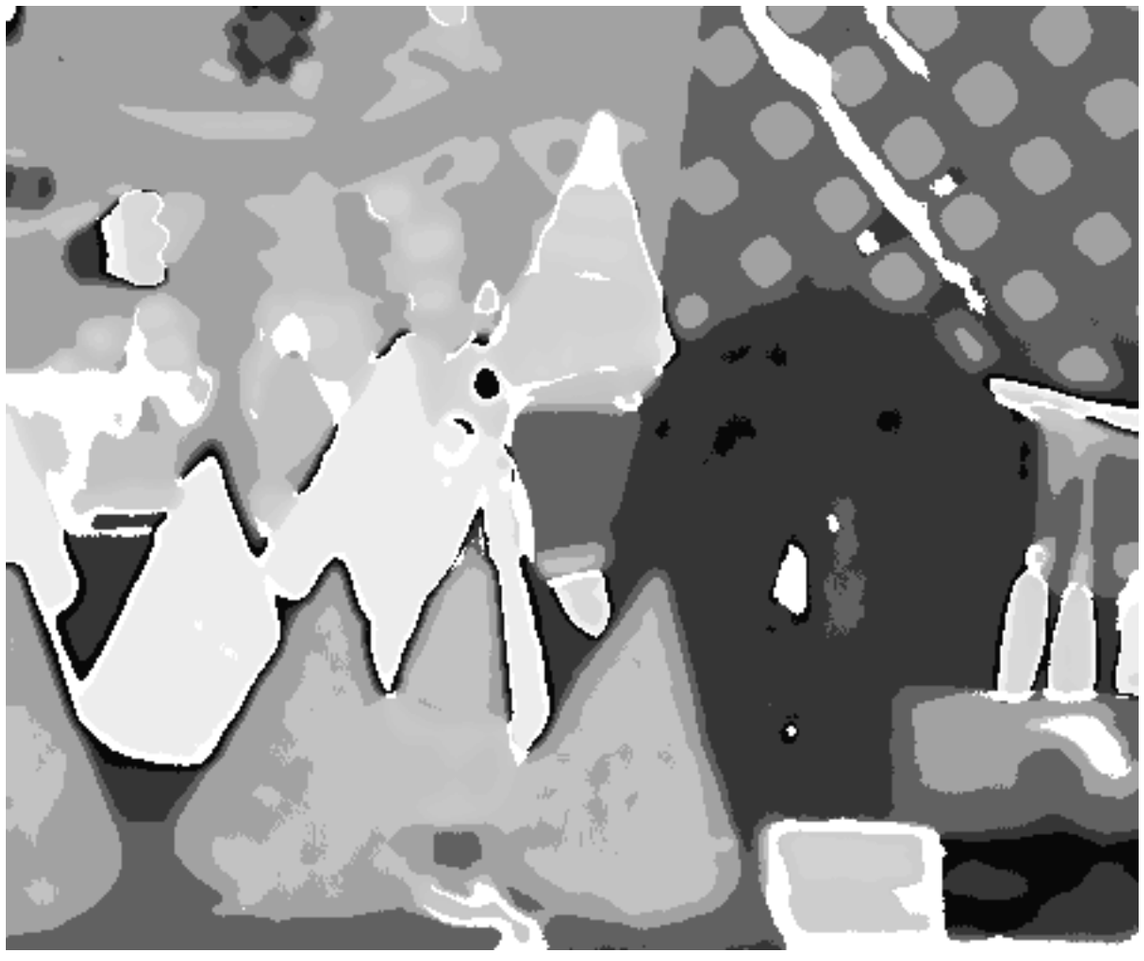
color segmentation using kColors=16 *& blur sigma=2*

edges from **color segmentation**

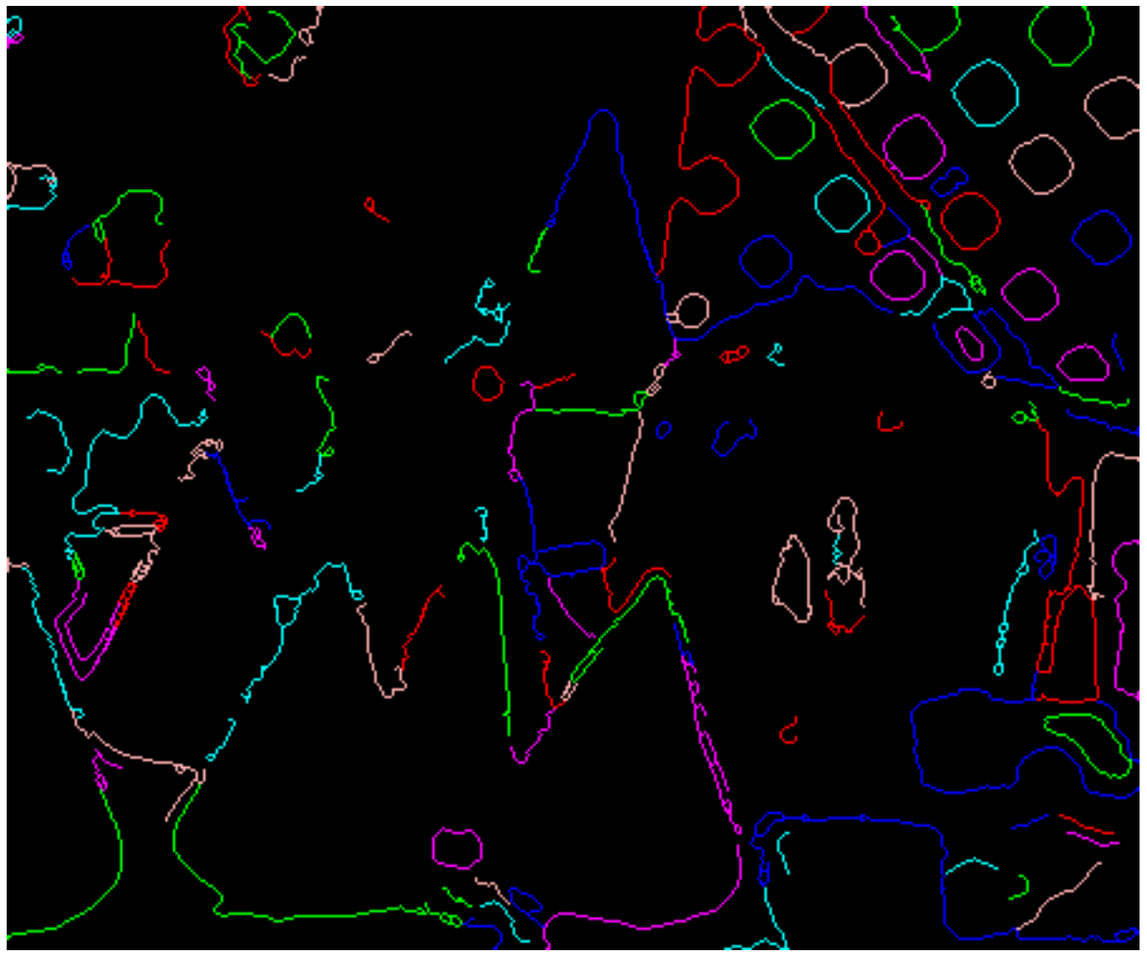


good for corners?

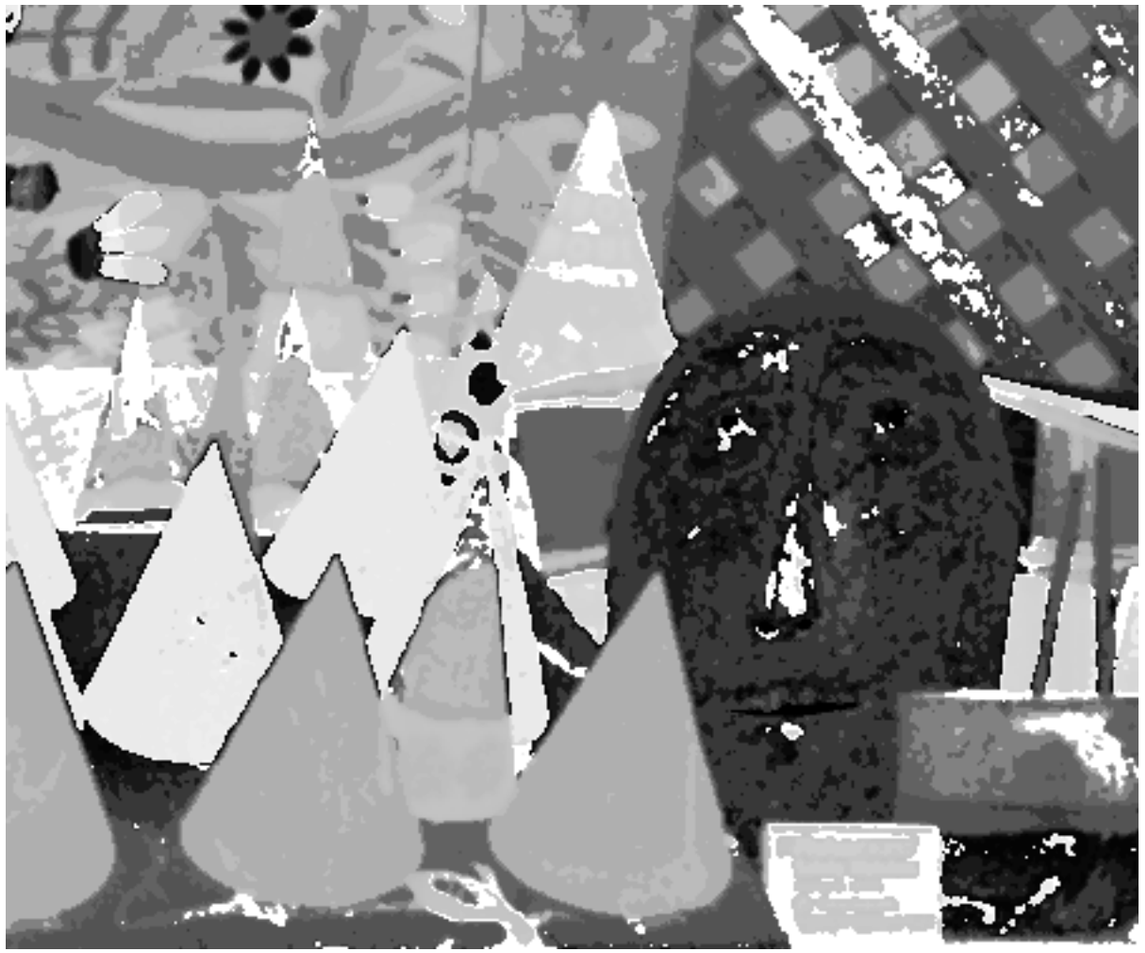
color segmentation using kColors=16 *& blur sigma=3*



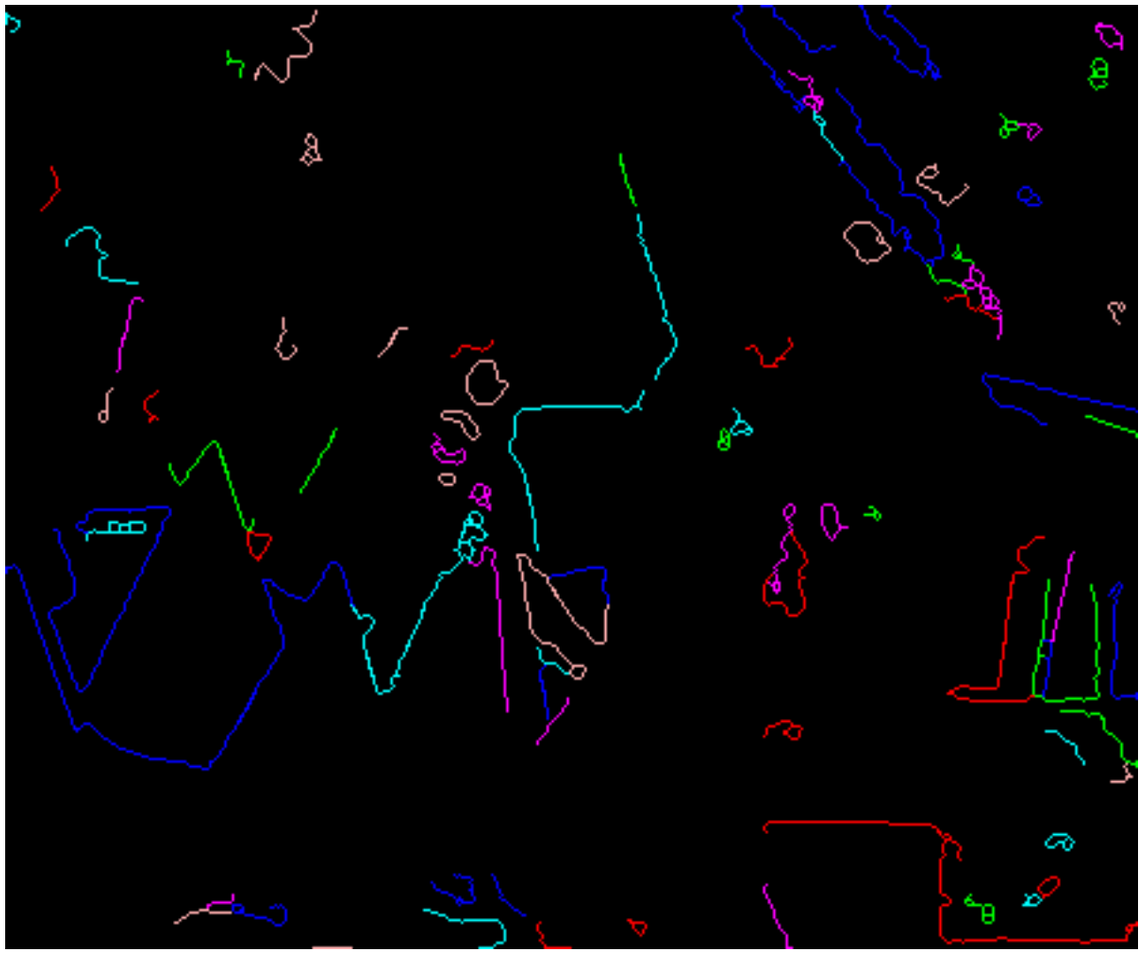
edges from **color segmentation**



color segmentation using kColors=32 *& blur sigma=1*

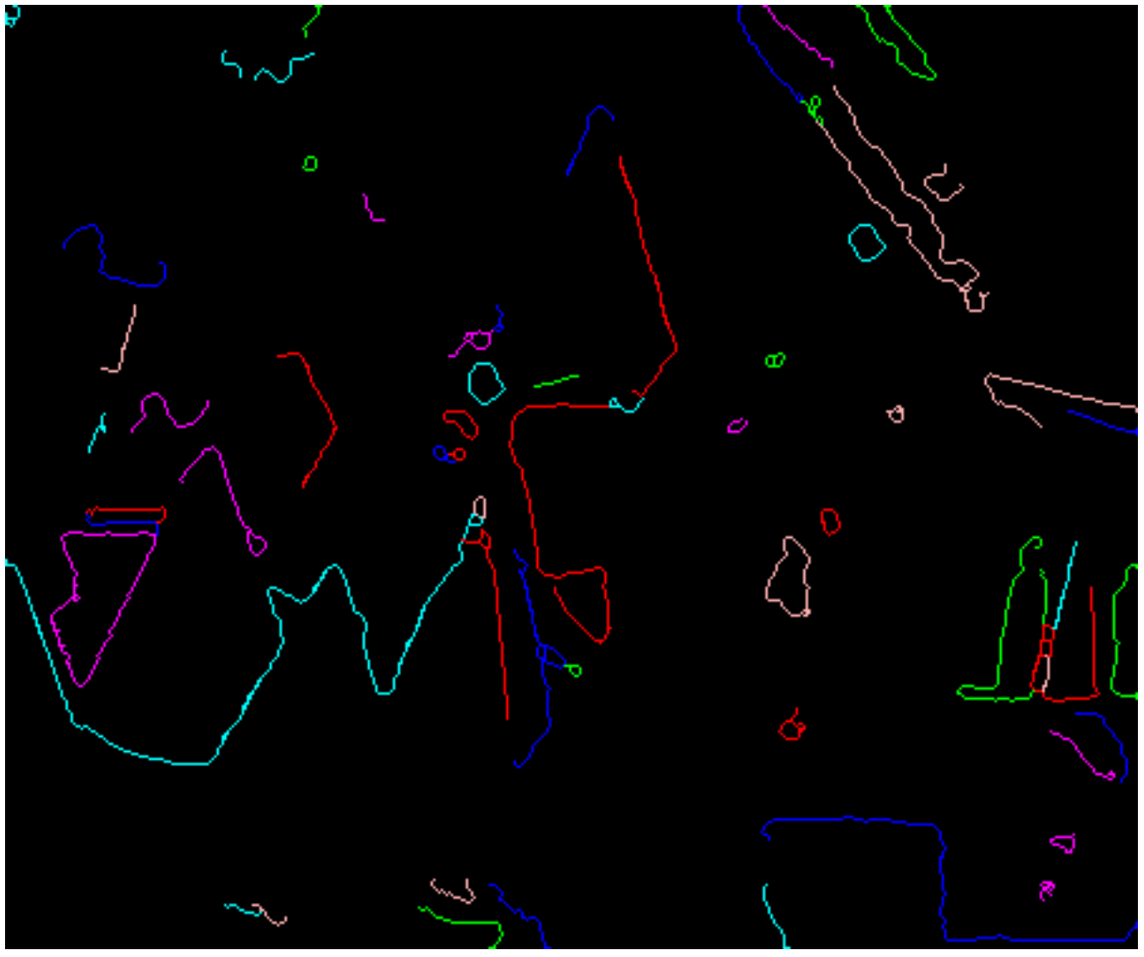


edges from **color segmentation**



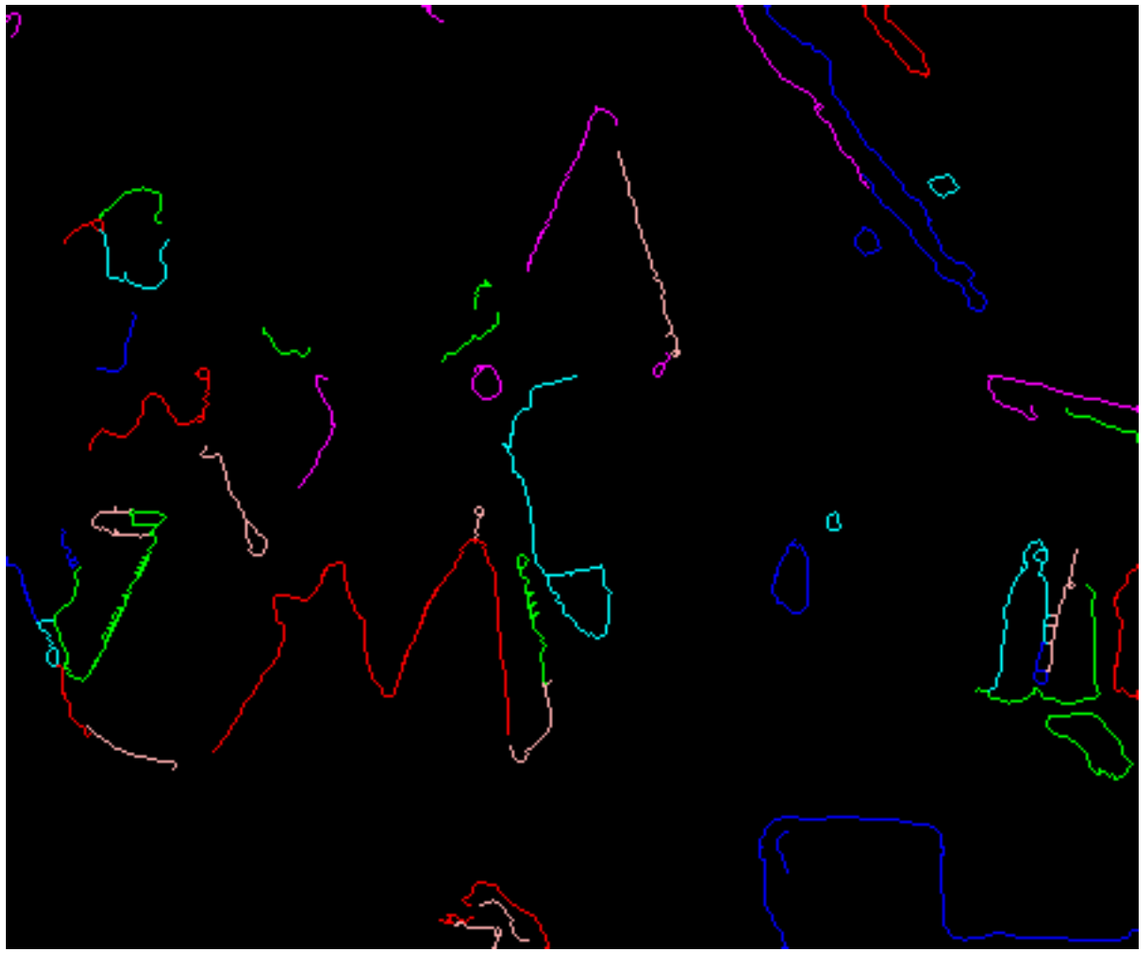
color segmentation using kColors=32 *& blur sigma=2*

edges from **color segmentation**

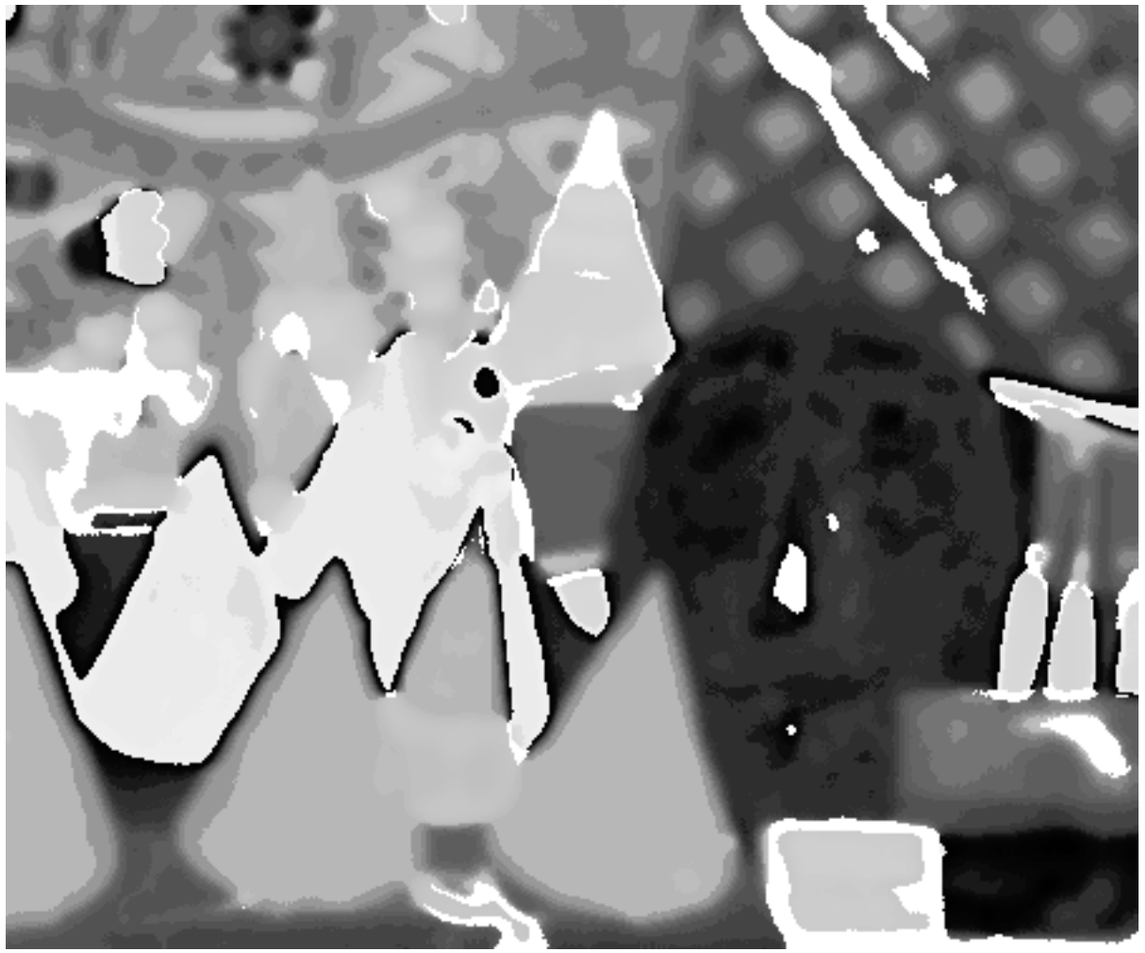


color segmentation using kColors=32 *& blur sigma=3*

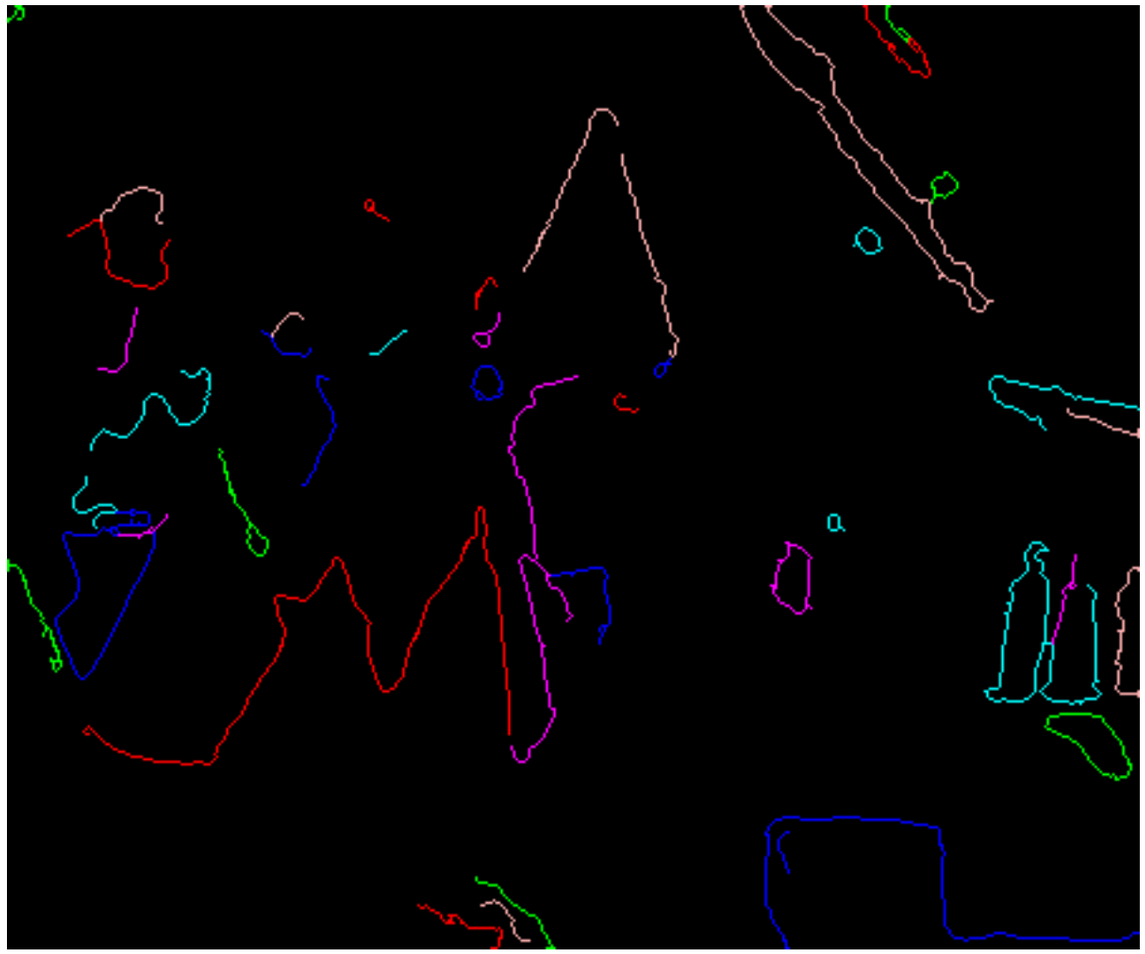
edges from **color segmentation**



color segmentation using kColors=64 *& blur sigma=3*



edges from **color segmentation**



color segmentation using kColors=253 *& blur sigma=3*

edges from **color segmentation**