Fall 2010 – LP2

Course Assignments
for

Information Visualization
4DV300 – Fall 10

1st assignment

Deadline for this assignment is Nov 30, 2010.

Task 1 *Read the article*

Each one of you should read the online article *Perception in Visualization* by C. Healey (see source below). You are encouraged to 'play' with the applets found on the site as they might help you understand some of the key points presented there. This article might help you solving the other assignments. After reading, answer the following questions related to the article:

1. Describe what *preattentive processing* means and discuss in your own words how it can be helpful for making a good visualization environments?

2. What strategy can be used to show multiple data objects with different attribute values simultaneously in a single image? What visual feature is favored in case of boundary detection?

3. What is change blindness? If possible, explain one case where it might affect the outcome of perception of certain visualization!

Article URL: `http://www.csc.ncsu.edu/faculty/healey/PP/index.html`

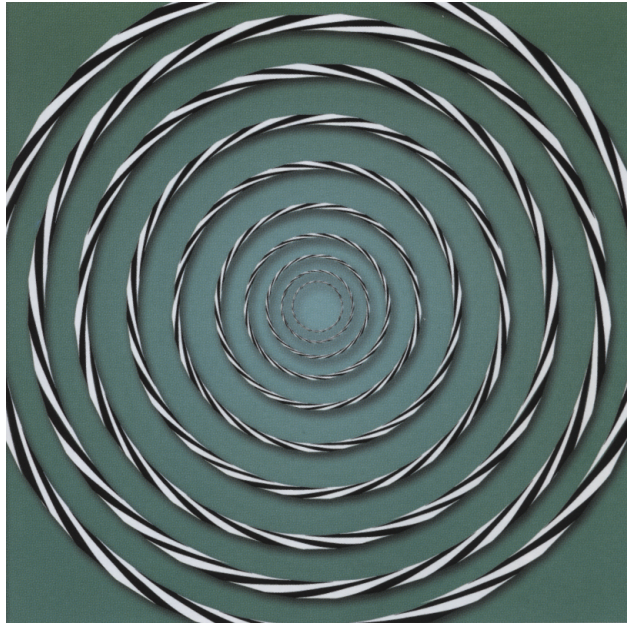**Task 2** *One example for good, and one example for bad*

In this task, you will have to find two examples of visualizations, charts or diagrams. One of them should depict a good use of perception theory, and one should present a bad use of perception theory. You should write a short explanation about both of them and discuss the reasons why you think they present good or bad examples respectively. You can take the samples from anywhere you like (web, books, magazines, etc.).

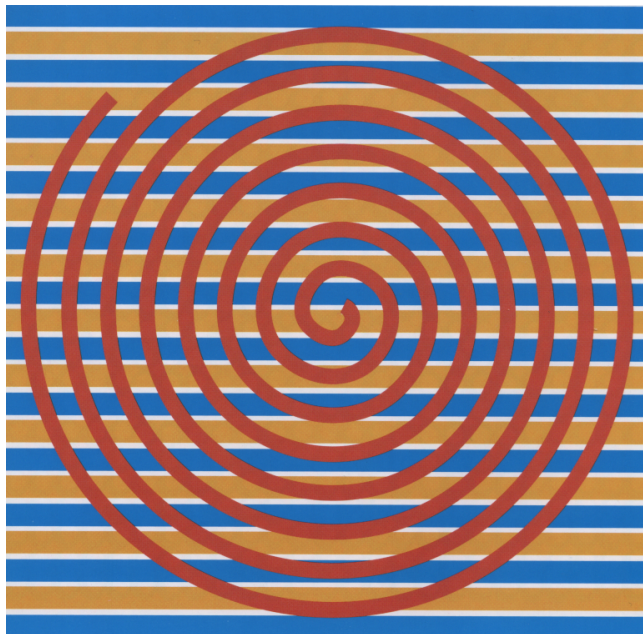Note: Do not forget to reference your examples!

Task 3 *Optical illusions*
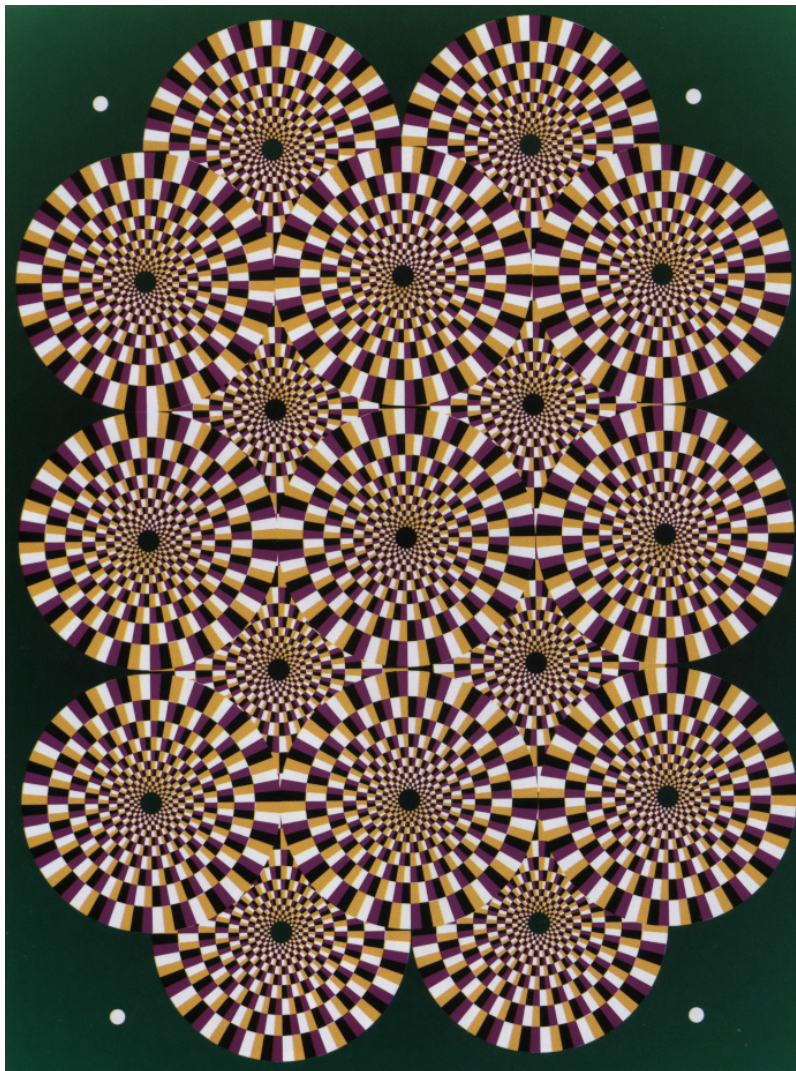Answer the questions regarding the images below them:

1. Are the circles consistently arranged around a common center point? Explain your answer!

2. Is the red color of the spiral the same everywhere? What do you see?

3. The circles seem to rotate! Why?