Visualization Design Critique

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Traditional Art Critique

Describe. What do you see?

Analyze. How is the work organized?

Interpret. What is the artist saying?

Decide. Is this a successful piece of art?

Visualization Critique

Describe. What do you see?

Analyze. What are the visual encodings?

Task. What is the purpose of the visualization?

Decide. Is this a successful visualization?

Critique Rules

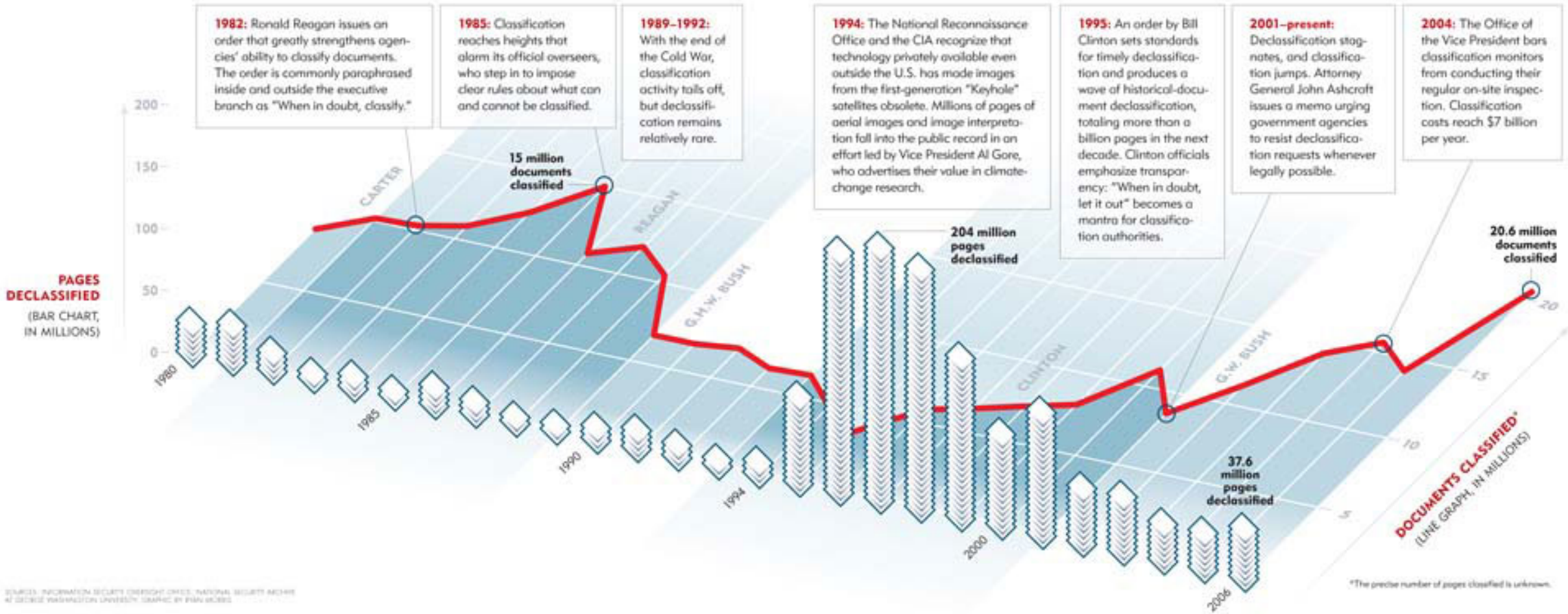
- Must use neutral voice; criticism must state facts and present them in balanced light
- Must be fact-driven; every statement must be backed up by facts
- Must have a clear goal; alternative solutions must be provided, and simply criticizing a work is not enough

CRITIQUE PROCESS

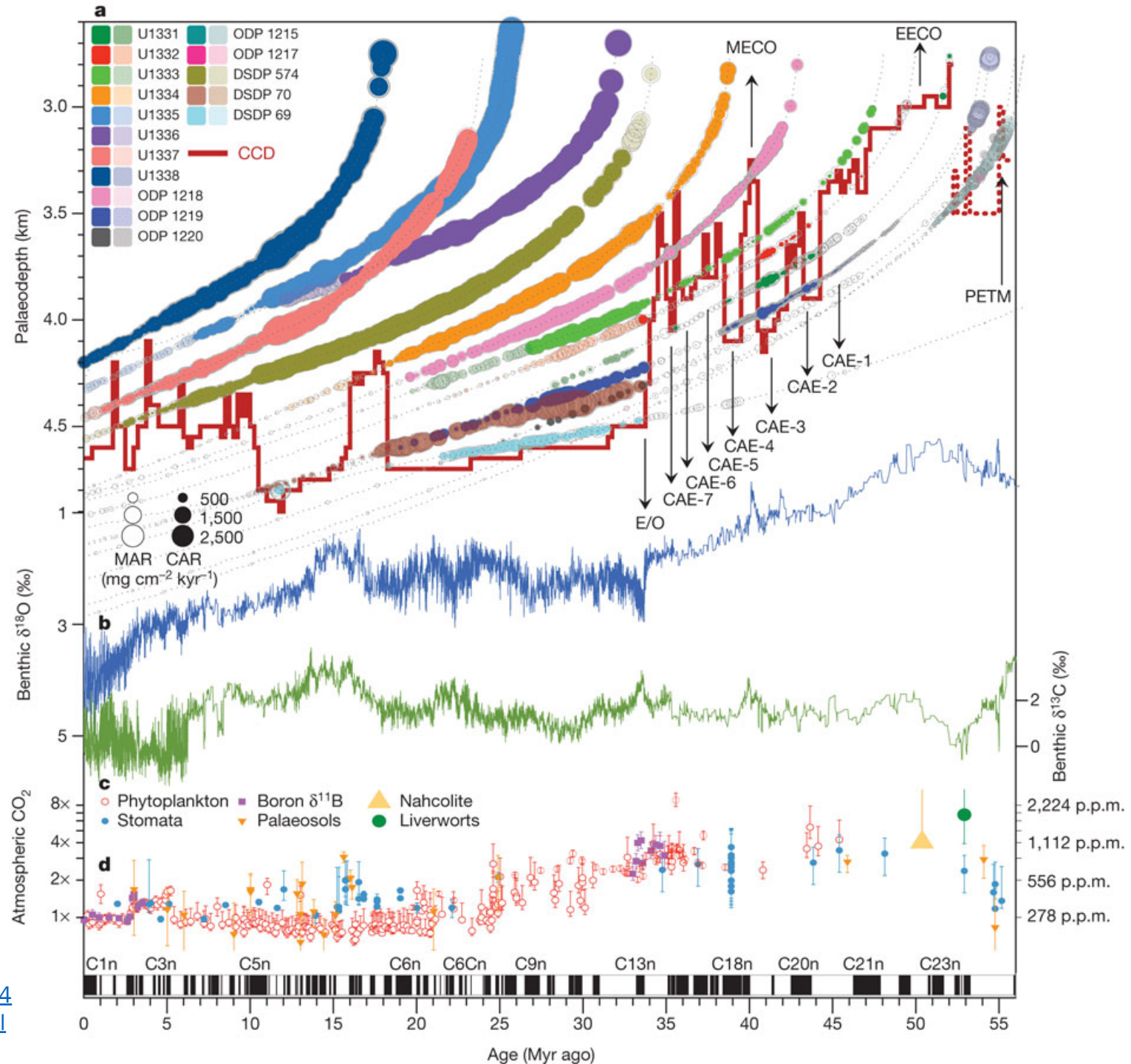
1. Break out into groups of 4-5 people
2. As a group, find 2-3 visualizations in the academic literature to critique
3. Discuss and critique the visualizations within your group
4. For each critique, use markers and paper to brainstorm redesigns of the visualization
5. Choose one redesign to refine and sketch in more detail
6. Be prepared to present to the class

CRITIQUE QUESTIONS

1. Who is the intended audience?
2. What information does this visualization represent?
3. How many data dimensions does it encode?
4. List several tasks, comparisons, or evaluations it enables
5. What principles of excellence best describe why it is good or bad?
6. Can you suggest any improvements?
7. Why do you like or dislike this visualization?



http://www.theatlantic.com/past/docs/images/issues/200709/win.jpg



http://www.nature.com/nature/journal/v488/n7413/fig_tab/nature11360_F2.html

ADVANCED PROCESS

1. In your group, select one visualization/critique to focus on
2. From that visualization/critique, choose 1-2 facets of the presented data that may be explored further
3. Create visualizations in R that depict those facets
4. Upload an image of your visualization(s) to Piazza and be prepared to present and share to the group