

Homework Assignment #6, Evaluating Figures and Captions

Effective figures and captions are critical in communicating science in meaningful, memorable, concise ways. Unfortunately, many figures and captions published in scientific articles are less than ideal. The purpose of this assignment is to give you practice in critically evaluating figures and captions so that you will be better able to design your own.

For this assignment, look at the figures in recent articles published in *Physical Review Letters*. (Go to <http://prl.aps.org/> and click on the “Recent Papers” tab, and click on the title of a paper that looks interesting to you to bring up the abstract. From the abstract page, click on the “Download PDF” link to see the full paper.)

If you are working on this assignment from a computer not on the .illinois.edu domain (i.e., from your apartment or a coffee shop), you’ll get a request to pay a fee to download the paper. To obtain the paper free of charge, log on to the PRL website through the UI Library gateway. Click on the Physics Library link in the footer of any Physics Illinois webpage to access the site. If you’re outside the University umbrella, you’ll be asked to log on using your netid and AD password.

Instructions are posted at <http://www.library.illinois.edu/sshel/education/educdistance.html>; this guide also includes several links on trouble-shooting if you have problems. You can also “Find a Specific Database or Journal” from <http://www.library.illinois.edu/learn/find/database.html>.

This homework assignment consists of identifying one “good” figure and caption and one “bad” figure and caption of your choice. Copy and paste the image and caption from the journal into separate pages in your homework document. Then write a brief analysis of each figure and caption and justify why to think it’s bad or good. Be sure to give the complete bibliographic citations for the papers from which you took the figures.

We’ve provided a [famous example](#) from Edward R. Tufte’s classic, *Visual Explanations: Images and Quantities, Evidence and Narrative* (Cheshire, CT, Graphics Press, 1997).

Due: **Friday, March 13, midnight**. Email your completed assignment to both Professor Gammie and Celia. Assignments submitted after the deadline will be downgraded. This assignment is ***not*** eligible for rewrite points.

Total—50 points (25 points for the suitability of your examples and 25 points for your written analyses).