

1. *Assignment*
 - a. Are there further questions about the social organization of mathematics?
 - b. Would somebody take a look at Higham 1993, chapter 9, and report to us soon about what it says concerning the presentation guidelines we've been discussing?
 - c. I googled "presentation guidelines" (without quotes) and found some interesting websites. Perhaps some of you could look at them and/or find others?
 - i. <http://classweb.gmu.edu/WAC/somguide/presentationguidelines.htm>
 - ii. <http://www.the-eggman.com/writings/keystep1.html>
 - iii. <http://pages.cs.wisc.edu/~bart/739/talk-guide.html>

2. *Germain paper*. We completed this discussion. Here are the rest of my comments.

- a. Paragraph *Sophie Germain's correspondence*.
 - i. I like this paragraph. I bet you worked hard on it.
 - ii. Do you see why I inserted the comma? It separates *accomplish* from *that*, which one might slur together when reading quickly. It also makes you stop, and that little silence lends emphasis to *unable* without your using italics that distract. (Oh: notice the genitive subject of *using* there.)
- b. Paragraph *In 1808 a*.
 - i. I suspect you mean *patterns*. But you might mean *patter* as in *pitter-patter*.
 - ii. Was 3000 francs a pittance or a fortune?
 - iii. Generally we try to identify people more specifically. My own policy is that first mentions in a subdivision bigger than a paragraph merit almost-full names, such as James T. Smith. Sometimes first mentions in a whole work merit complete names and dates as well, such as (1939–). Later mentions can use surnames only, unless you have to distinguish me from other Smiths. My point is that although I know who three of the five judges were, I'm not sure about Lacroix (there may have been more than one scientist with that rather common name) and I never heard of Malus, so wonder who he is.
 - iv. You didn't mention Legendre earlier as her mentor.
 - v. Citation of Chladni's book would be interesting. But it might not be easily available. If I didn't find it listed in Melvyl, I would have worded your footnote this way:

Bucciarelli 1980 (page 35) noted that Chladni quoted the announcement of the contest in his book *Traité d'acoustique*.

But I would try hard to find the date and publisher of the book, and even to find the announcement therein, so that my footnote could read,

Chladni (date, page) quoted the announcement of the contest.

[Added later: it's in Melvyl.]

- vi. There are several ways to avoid comma pileup (you have three) around dates:
 - (1) SG's entry was the only one the acad. had rec'd. by the October 11, 1811, deadline. (two commas)
 - (2) SG's entry was the only one the acad. had rec'd. by the deadline, 11 October 1811. (one comma)
 - (3) At the 11 October 1811 deadline SG's entry (no commas)
- c. Paragraph *In 1811, because*.

- i. You have some tense errors: you used past (was not) where pluperfect was appropriate, and present (can) where past was appropriate. You'll have trouble finding guidelines for those.
- ii. The inline formula should be rendered $(1/r) + (1/r')$. Remember, italics for variables. You'll have to fish for the proper prime.
- iii. You probably mean *double integrals*.
- iv. You need to download and learn to use *MathType* for the displayed equation. It's free to SFSU students.
- v. You should have said what r, r', x, y, z, k stand for.
- vi. You just answered a question: in differential equations classes I've often told students I didn't know of applications of differential equations of order higher than two. Now I do: this has order four!
- vii. It would be stronger to say *focused on deriving* rather than *focused on trying to derive*. Just last night I was watching a rather deplorable drama, *Unit*. When a sergeant pledged, "Yes sir, I'll try to do that in the future!" his master sergeant replied, "Sergeant, that means you'll *fail* to do it!"
- viii. You're falling apart a bit because you're unsure of yourself. You just wrote, "she did not have the fundamental understanding needed to fully understand". It would be clearer to write "she did not understand".
- d. Paragraph *Once again, Germain*.
 - i. Hypotheses are generally propositions presented without full justification. So I don't know what this means.
 - ii. The honorable mention is interesting. I've been dealing with awards of the Lobachevsky Prize by the faculty of the University of Kazan about a century later. For one of those competitions they had more than one entry, I believe, but decided to award only an honorable mention. (My guy Pieri won honorable mention in 1904, outclassed by the winner, Hilbert.)
- e. Paragraph *Once again, Germain*. You should generally spell out small numbers, except when referred to as numbers: three students scored 4 points and two scored 2.5 each. It's clearer.
- f. Paragraph *Regardless of the*.
 - i. What academy?
 - ii. I suspect there's a missing word or phrase in the quote, because *independently* doesn't seem to modify anything.
 - iii. The way to do references is to give a complete citation in the bibliography (but not specific page numbers unless the work cited is part of something else). Then you put a footnote (or endnote or inline note) indicating that item, with the appropriate page or section number. So your footnote could read simply Bucciarelli 1980, 108. That way you can cite many different places in the same work without much ado. Look at my Pieri book as an example.
- g. Paragraph *Throughout her attempts*. You've a case of a near-double-negative: *without...not leading*. In English this literally means *with...leading*. I suggested a rewording.
- h. Paragraph *Once Germain received*.
 - i. Ohhh, you missed a gender inequity! How many theorems named for male mathematicians have you heard of whose names include the forename as well! Only when necessary to distinguish male mathematicians with the same surname, as the Bernouillis, or Beppo and Fritz Levi. Female forenames, or the inclusion of *Miss* or *Mrs.* in a list of names otherwise undecorated, was common until *very* recently.
 - ii. The last sentence of this paragraph is unintelligible: you transcribed something incorrectly.
- i. Paragraph *This work is*.
 - i. I marked a run-on sentence. It needs to be split, because you want to greatly emphasize the individual thoughts in this concluding paragraph.
 - ii. You should—*very much* should—have figured out who Libri was, given full information, and cited the publication details of the obituary, even if you can't read it directly.

- I never heard of him, and just what publication issues an obituary and who writes it is a delicate and informative matter. See the information about obituaries in my Pieri book. [Added later: I just found Libri. Quite a story: real melodrama! But I haven't actually identified the book.]
- iii. Concluding paragraphs or sections are hard. They require pass after pass of editing, and sometimes sudden visions or epiphanies. It's also very hard to write about the death of someone you've grown fondly acquainted with.
 - iv. You might want to look in the Pieri book at Section 1.1 from just before the heading **Afterward** to the end, and at Section 5.3 (which is really the book's concluding section). I had a terrible time with the first, about Pieri's death, until I came upon the eloquent oration by the village priest. It was then suddenly clear what to do. For the conclusion of the book I had many arguments with myself, then it came down to outlining what sort of things to say, then realizing that if I brought in the story of Mrs. Pearson at that point (which didn't really fit elsewhere), I could put the book to bed nicely. Whew!
 - v. Explanation and credit where it's due. My coauthor did most of the research on the book— virtually all of the work with the sources in Italy. I've been putting the whole thing together from what amounts to her research notes.
- j. *Bibliography*
- i. I didn't note any references to Aczel, Del Centina, Grinstein & Campbell, James, Morrow & Perl, Osen, or Perl. Maybe I missed them. But I suspect that you synthesized material from them into your paper and want to give them credit. If they deserve that, they deserve to be cited where you used their work. Or if that is too vague, or you used them mostly to get to something else, you should have a paragraph that says that. The point is, it doesn't do the world any good to know that you read and copied the titles of some books. We want to know what they are about and what you got from them.
 - ii. Teri Perl, by the way, is a local person who has worked in our Department. Her son is Jed Perl, who has a recent major book out on the national art scene.