

1. *Assignment.* After a brief class discussion it was decided to look at Tarski 1955 next time. So, glance through it and ask the same questions that were raised about Smith 2002.
2. Further discussion of Smith 2002, with attention to these questions:
 - a. What methods are used?
 - b. What would you have to study to be able to understand them?
 - c. Are there extensions of this material?
 - d. Does this material have interesting connections to other subjects?
 - e. Are there references to supporting documents?
3. I preached a bit about references.
 - a. The purpose of references is *not* to tell somebody what you read. The purpose is to show readers
 - i. how to find the information on which your writing is based, or
 - ii. how to find related material.
 - b. I feel that if (ii) is important at all, it is important enough to be discussed in your main text. Thus (ii) can be eliminated.
 - c. There's no point in giving incomplete references: they don't help the reader. They, and incorrect references, actually hinder the reader.
 - d. Complete references are often complicated, hence very susceptible to error. To minimize errors, a complete reference should be given *only once*, so that you only have to correct your errors *once*.
 - e. Most publishers have fairly explicit rules about references. Birkhäuser agreed with me about a system I developed for Marchisotto and Smith 2007, based on recommendations in Chicago 1993. I'm following that for the bibliographies of this course and Math 800. The latter is much larger.
 - f. Most writings refer to many references more than once. One way to handle that is with the old *op. cit.*, *loc. cit.*, and *ibid.* conventions. But they're maddening: no reader wants to flip through pages to find the original citation.
 - g. My scheme, which I urge you to follow, consists in the following:
 - i. A *references* or *bibliography* section at the end of your writing, with complete citations of everything used in your work.
 - ii. Within your text, citations like *Smith 2002, page 614*, that point to a bibliographic item and provide information special to the current context. These citations can be
 - (1) in the text itself, or
 - (2) in footnotes, or
 - (3) in endnotes, after each chapter or at the end of your work.
 - iii. I dislike endnotes (3) because I have to keep my place in two parts of the work at once. I use either (1) and (2), depending on the length of the citation. Some publishers forbid footnotes because they're hard to typeset.

- h. You will probably encounter questions on how to cite various kinds of sources. Almost all such questions can be sorted out by realizing that one source often contains another: for example a book, say *Source 1984*, consisting of papers by various authors. The bibliography should contain one entry for the book, and one for each paper in it that you actually use. The latter entries give the data about the individual papers, including that they are *in Source 1984, pages abc-xyz*.
- i. A huge variety of such questions occurred during compilation of the Marchisotto and Smith 2007 bibliography. Look there for models. (When you need a password, use ***)
- j. Here's a tip to use *immediately* as you start reading stuff for a possible paper. When you take notes on something or xerox it, by all means xerox the title page(s) of the book or journal it came from, maybe even the table of contents. Keep that with your notes or copy. It only takes a few seconds and a dime to do that, but finding that information again during your writing phase can take hours or even days, if the item is no longer accessible in the library.
- 4. *Social Organization of Mathematics*. Is it worthwhile to discuss this in an organized way? Maybe you've long wondered never felt up to asking. Here's an opportunity!
 - a. In class it became apparent that you are not at all familiar with the organizations that are loci of everyday activity for faculty.
 - b. My impression is that the situation is quite different in other disciplines. At least, my wife, who earned a master's degree in international relations here around 1968, was expected, as a senior then as a graduate student, to be familiar with such things in her area.
 - c. Major mathematical societies in the US. These all have big websites. Check them out!
 - i. An organization of organizations: *Conference Board of the Mathematical Sciences (CBMS)*. Small. Takes care of some common interests.
 - ii. *American Mathematical Society (AMS)*. Big. I'm a member, as are several colleagues. Research-oriented, publishes many journals and books, organizes national and regional research meetings, attempts to exert public and legislative influence, runs the annual meat market. The Pacific Section meeting was at SFSU two years ago.
 - iii. *Mathematical Association of America (MAA)*. I'm a member, as are several colleagues. I was once a regional officer and continue organizational work. Less research-, more teaching-oriented, publishes several journals and many books, cooperates with AMS on national meetings and organizes its own regional meetings, attempts to exert public influence. The Northern California Section meeting will be held at CSU Sacramento on 1 March.
 - iv. I don't know much about the remaining societies, but they all do some of the same things.
 - v. *American Mathematical Association of Two-Year Colleges (AMATYC)*.
 - vi. *National Council of Teachers of Mathematics (NCTM)*.

- vii. *Association for Computing Machinery (ACM)*. I used to be a member.
- viii. *Society for Industrial and Applied Mathematics (SIAM)*. At least one faculty member belongs.
- ix. *Association for Symbolic Logic (ASL)*. I used to belong.
- x. *American Statistical Association (ASA)*. At least one faculty member belongs.
- d. To be continued next time.