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1. *Assignment*
 - a. Are there further questions about the social organization of mathematics?
 - b. Continue reading Gillman 1987 and prepare to discuss it. Who are the leads for chapters 5 and 6?
 2. *Abstract & story line*
 - a. We discussed these topics a little, previously. I just submitted an abstract, *Definitions and Nondefinability: Pieri and the Tarski School*, which illustrates some of the points. It's posted on the course website.
 - b. The route to the abstract was a little strange.
 - i. I found a story line in Marchisotto & Smith 2007, then made it into a May 2007 talk for the SFSU Mathematics Department colloquium. For that I constructed a fairly elaborate slide-show presentation. The talk was a little longer than the desired 50 minutes.
 - ii. I trimmed it a little and presented it without technology at the State of Jefferson colloquium in October 2007. Still a bit too long for 50 minutes.
 - iii. I decided to submit the talk for delivery and publication at the congress on *The School of Giuseppe Peano between Mathematics, Logic, and Interlingua* to be held 6–7 October 2008 in Torino, Italy. They required an abstract now, 1–3 pages, 1500–4500 characters, plus one page of bibliography. If they accept the paper, then I'll have to pare the talk down to 30 minutes, but then I'm to submit the full paper by 15 October for publication in the conference proceedings.
 - iv. After several false steps, I decided to regard the SFSU slideshow as an outline, then draft a paper almost in full. It has an introduction, which serves the same purpose as an abstract: to attract readers.
 - v. The introduction was about 1 page, 1700 characters. It formed the core of the abstract. Then I went through the rest of the draft paper and flagged passages that had not been foreshadowed by the introduction. They should be added to the abstract, somehow. That worked: it's now about 3 pages and 4450 characters.
 - vi. I'll hear about acceptance by 1 June.
 - vii. Editing the abstract reminded me of a deplorable overemphasis in my high-school college-English class: writing 150-word paragraphs. I became extremely adept at using as few words as possible to make a point, but got virtually no experience in writing anything longer until I was in college. My first college paper was graded D.
 - c. Read the abstract for a good example of a story line:
 - i. Peano's logic and use of motions, followed by
 - ii. Pieri's amplification of those, which led to
 - iii. Pieri's success with the equidistance notion and lean logic, and after some dormancy,

- iv. Tarski's adaptation of Pieri's approach, and his
- v. succeeding with a succinct first-order theory, culminating in
- vi. Tarski's and Lindenbaum's proof that Pieri had done as well as possible with first-order logic. And then a postscript:
- vii. Pambuccian's result that goes Pieri one better by strengthening the logic.
- d. The story line could be extended back a step to Pasch, who introduced the type of definition Pieri used. But there wasn't space for that in the abstract. It will be in the full paper.
- e. There's also an attractive subplot: in 1904 Veblen tried an approach that if successful would have been on a par with Pieri's equidistance approach. In 1907 it was criticized severely, and in 1935 Tarski proved Veblen wrong. That is mostly in the abstract and paper.
- f. An open historical question worth mentioning in the paper: why was Pieri 1908 translated into Polish? Did Tarski in fact read that? The answer would be a nice subplot too, but won't come until I attract a Polish collaborator.
- g. The paper will certainly be expository. The only technical original historical work was digging in obscure publications and noticing influences. Some of those feature in the paper but not in the abstract. I'll cut some background material on axiomatics that I used in the colloquium presentations. I'm thinking of building that back in to a somewhat longer paper for the *Monthly* or *Mathematics Magazine*. But, first things first.
- 3. *Mr. Fahramand's outline*: initial discussion.
- 4. *Gillman 1987, chapter 4*. Mr. Fahramand led us to conclude this discussion.
- 5. *Gillman 1987, chapter 6*
 - a. We started this under Ms. Afaga's guidance, because the leader for chapter 5 was absent.
 - b. The major point discussed was *which* vs. *that*. This is a common mistake of non-native English writers, because other languages don't make the same distinction.