
Letters to the Editor

Egalitarianism of Mathematics

In the February 2013 issue of the *Notices*, it is claimed in an Opinion piece by the editor and in a Letter to the Editor that mathematics as a subject is egalitarian. It may appear so to those inside the wall as they greet each other within the cloister's walls but it certainly does not appear to be so to those of us outside.

The editor assumes that mathematics-as-subject is independent of mathematics-as-profession. He then argues that while the profession is not egalitarian, because of this independence, the subject can be and, in his view, is. The author of the Letter to the Editor says mathematics is egalitarian because it is "open to all with the requisite talent and training." For this writer, the work itself—the talent—does not suffice. It seems to me that the requirement of training asserted by the second author denies the independence of subject and profession asserted by the first. Which one is closer to the truth?

There is no empirical foundation to mathematics against which contributions can be measured in an objective manner. This is not true of other sciences. If one discovers a new comet or a new bird species one is acknowledged as having contributed to astronomy or ornithology and is considered thereby to be a member of the community. It would be absurd to assert that the discovery of a new comet is void because the person making the discovery is unable to present credentials of their training in astronomy. The empirical sciences can successfully argue that subject and profession are independent and that it is therefore possible for the subject to be egalitarian even if the profession is not.

Without a subject-based means to measure contribution, mathematics takes training as a proxy. It is the requirement of a credential in order to participate that binds subject to profession. Because of this binding, the nonegalitarianism of the latter comes to cloud the former. Thus I

think that the letter writer is closer to the truth than the editor.

The credentialed mathematics profession has built a wall around American mathematics as a subject. The profession is the gate-keeper of the journals, the grants, the conferences, and even online repositories such as arXiv. Mathematics as a subject is not egalitarian because how it is defined and what it contains is determined solely by a nonegalitarian profession.

—Scott Guthery
Independent scholar
Boston, Massachusetts
sbg@acw.com

(Received January 20, 2013)

An "Adventure" That All Should Experience

Darryl Yong's article, "Adventures in Teaching", in the November 2012 *Notices* should be required reading for any professor, administrator, politician, or business executive who decides to wade in to solve the problems of teaching mathematics. Professor Yong's description of the high school environment is deadly accurate. My wife and I are currently college faculty but the majority of our combined seventy-nine years of teaching mathematics was accomplished in the elementary, middle, and high school grades.

In the 1980s there was the Holmes Group, which attempted to create relationships between universities that prepared teachers and school districts. The sharing that would take place would benefit both organizations. Somehow, the Holmes Group faded away but Professor Yong's adventure should be experienced by all university mathematicians who teach courses to future teachers.

Years ago, when I was a mathematics professor at a large state university, I spent an hour every day teaching at a school in the local school district. For example, one year I taught sixth grade mathematics every morning. I was my students' math teacher. I did this as a volunteer. I was not paid a salary nor

did I ask for (or receive) a reduction in my university teaching load. My sixth grade students benefited from my knowledge and I was allowed to retain my knowledge of the public school classroom dynamics. It was a positive experience for everyone except for some of the mathematics educators in our department. They complained that I was being counterproductive since they could not hold meetings when I was at the intermediate school. I believe the reason for their negativity was they were afraid to be asked to duplicate what I was doing.

If you are a university mathematician teaching future teachers, what you should do is replicate Professor Yong's experience. Ideally universities should recognize that faculty teaching in the local schools is more valuable than writing an article on teaching factoring quadratic trinomials to a group of pre-service teachers.

—Murray H. Siegel
Arizona State University
Polytechnic campus
Murray.siegel1@asu.edu

(Received November 30, 2012)

Some Fine Points about Henri Matisse

In reference to the January 2013 issue of the *Notices*, page 27: The articles about I. M. Gelfand are undoubtedly very solid in the large, but not always in fine detail.

The editors have done an injustice to I. M. Singer by printing the following statement about the painter Henri Matisse: "Particularly outstanding is his late work: Jazz and the remarkable 'papier-découpés', efforts done in the early 1880s."

Matisse would have been in his early teens in the early 1880s, having been born on the last day of 1869. Thus in "1880s", two of the four digits must be incorrect. In fact "Jazz" is dated 1947, and that is the period of the "papiers découpés"—note that there are also a number of typographical errors in that phrase: a missing plural, an unnecessary

hyphen, two missing accents, and a superfluous “L”. Possibly Professor Singer wrote the second accent and it was mistaken for an L? We could also hope that Professor Singer had written “in his early ‘80s”, but that would be barely correct for some of the cut-paper works, and incorrect for Jazz.

I am surprised that the editors did not have any idea of Matisse’s dates (1869–1954), which might have prevented some of this. And they should know to check their French.

—Martin C. Tangora (*emeritus*)
University of Illinois at Chicago
tangora@uic.edu

(Received December 21, 2012)

Review of Manin Documentary

The January 2013 *Notices* had a review by Gunther Cornelissen of the DVD *Late Style—Yuri I. Manin Looking Back on a Life in Mathematics*.

In his review, Gunther Cornelissen criticizes the fact that the film does not achieve the goal of documenting Yuri Manin’s outstanding work in mathematics.

We, the creators of the film, would like to say that from the beginning we were aware that it is not possible for us, as nonmathematicians, to document Yuri Manin’s life work. But does this put a ban on a biographical approach? For three years we accompanied Yuri Manin and his wife Xenia Semenova from Bonn to Moscow, Paris, and Simferopol, where he was born and grew up. Yuri Manin gave us impressive insights speaking about his life. These documents give information which alone makes the video worth watching.

—Agnes Handwerk
Freelance journalist
Hamburg
ahandwerk@gmx.de

—Harrie Willems
Freelance journalist
Amsterdam
hwillems007@gmail.com

(Received January 16, 2013)

Missing the Point

This is in reply to a letter by Alexander Eremenko (*Notices*, Vol. 59, No. 5, May 2012), titled “Uncritical use of citation database”. This letter referred to our paper in the *Notices* (J. Panaretos and C. Malesios “Influential Mathematicians: Birth, Education and Affiliation”, February 2012, vol. 59 (2), pp. 274–286).

A. Eremenko criticizes the inadequacies of the Thomson Database HCR list. He also questions whether the number of citations is a reasonable measure of the scientific influence of a mathematician. Unfortunately, he is completely missing the point of the paper.

As is quite clearly stated in its introduction and conclusions, the purpose of our paper was *not* to rank mathematicians (e.g., by selecting the “most influential”) or to argue in favor of citations as a measure of assessing the quality of mathematicians—on the contrary we made extensive mention of the shortcomings of the use of citation statistics.

Its purpose was to point out that, when citations are used as an institutional/national indicator (whether we like it or not), they reflect only the current affiliation of the scientists; we wanted to investigate whether a different picture emerges when the mobility patterns of these influential mathematicians are taken into consideration.

For better or worse, a database that is often used for citation indicators is the Thomson database. Notwithstanding the weaknesses that this or any other similar database may have, it would be hard to question the fact that most of the mathematicians included in the list have had noteworthy mathematical and/or scientific influence. Are they the “most” influential? This we did not presume to judge anywhere in our paper. Are they even the most cited? We did not claim this either, and referred to them as “highly cited”. Would the inclusion or exclusion of a few names drastically change the emerging mobility patterns? Certainly not.

Indicators and databases are here to stay, and instead of simply rejecting them as “almost useless”,

it is important to critically extract as much useful information as we can from them, while pointing out their weaknesses and deficiencies. Doing so is much more likely to communicate the special aspects of our subject to decision-makers and the general public and to advocate for better quantitative measures.

—J. Panaretos and C. Malesios
Department of Statistics
Athens University of Economics
and Business
Greece
jpan@aueb.gr

(Received January 10, 2013)

Correction

The photograph of John G. Hocking (*Notices*, March 2013, page 335), should have been credited “Photo © 2010 Susan Marie Davis”. The *Notices* apologizes for this omission.

—Sandy Frost