

## Letters to the Editor

### Varieties of Mathematical Truth

It is ironic that Melvyn Nathanson's essay on truth (*Notices*, August 2008) appeared in the same issue as Olle Häggström's review of *Irreligion*. The question is, what truth is Nathanson concerned with? My guess is that Brouwer or Heyting or someone of their schools of mathematics might find a lot more mistakes in papers than he does. After all, Brouwer spent a lot of years explaining why his celebrated theorem was not true. Presumably what Nathanson means by truth is playing mathematics by the standard rules of the game.

Meanwhile, Häggström shows us why the logic applied to some questions is not to be trusted. Question is, where is the line we can trust? The answer to that question divides a number of philosophies which have fallen from fashion in the latest century.

—Jim Chaffee  
j.chaffee@gmail.com

(Received September 2, 2008)

### On the Mumford Donation

In the September 2008 *Notices* David Mumford wrote an "Opinion" piece describing the aftermath of his decision to donate his share of the Wolf Prize money to Birzeit University and to an Israeli organization that advocates for Palestinian interests. In the piece Mumford touched on various issues that I believe require further explication.

Mumford relates that he received emails from Israelis expressing fear concerning radical campus activity on the West Bank, and notes that there is "no way to totally refute this fear". Indeed, there is much to fear. Hundreds of Israelis have been killed and maimed by suicide bombers who were students at Birzeit. Equally disturbing is the impact these events have had on the student body politic at Birzeit. In a campus debate in 2003, a Hamas candidate taunted his Fatah challenger by saying, "Hamas activists in this university killed 135

Zionists. How many did Fatah activists from Birzeit kill?" Only the fence and other security measures have reduced the number of suicide attacks and brought a relative calm in recent years.

Lest we think that radical student action only takes place on the West Bank, Mumford notes that "even Harvard had its unabomber." These cases could not be more different. The unabomber is regarded in the U.S. as a sociopath, and as soon as his family realized that Kaczynski might be the unabomber, they turned him in. By contrast, the suicide bombers from Birzeit were treated as heroes by the populace and, with few exceptions, their families expressed pride at the deadly actions of their children and the murder of men, women, and children in Israel.

Mumford bases his support for Birzeit on general principles of academic freedom. However, when it comes to similar rights for Israelis, many faculty at Birzeit demur. For example, in 2006 a large number of faculty at Birzeit signed on to a call for a crippling boycott of Israeli academics. In the face of such actions, support for Birzeit on grounds of academic freedom rings hollow.

The true shining light in this story is the academic community in Israel. Although Mumford was a signatory to a particularly one-sided Harvard-MIT petition for divestment from Israel, the community in Israel nevertheless put politics aside and recommended Mumford for the Wolf Prize based on his mathematical achievements. This action is a model of the academic spirit that we should all try to emulate.

—Percy Deift  
Courant Institute-NYU  
deift@courant.nyu.edu

(Received September 9, 2008)

David Mumford's generosity ("Opinion" *Notices*, September 2008) is marred by his one-sided blame of Israel for the situation in the West Bank. Israelis, both academics and

others, would be delighted if checkpoints on the West Bank could be dismantled. They were instituted only after waves of suicide attacks, and continue to save lives.

It is unfortunate that Palestinian students are inconvenienced by Israeli security measures. What is forgotten is that Israeli students and academics have themselves been unable to travel to most Arab lands ever since 1948. They find themselves the subject of numerous boycotts by academic organizations in the Middle East. Those boycotts have been in force since the failed 1948 invasion of Israel, long before the 1967 war.

Mumford is himself a signatory to moves aimed at crippling Israeli universities. Such action would affect not only Jewish students and faculty, but also the many Israeli Arabs who study, and teach, in Israeli universities.

Mumford talks of Palestinians setting up Birzeit University after the 1967 "occupation". That "occupation" was the consequence of yet another attempt to destroy a small Jewish state, and would have ended had Palestinian leaders accepted President Clinton's Camp David plan. Moreover, Birzeit became a fully fledged university only during Israeli rule. During the preceding Jordanian rule, Birzeit could not offer four-year degrees.

It is counterproductive to continually target Israel, while ignoring the broader academic situation in the Middle East. There is less academic freedom outside Israel than within. There are numerous issues restricting academic freedom in the region that never receive attention.

We look forward to a time when Palestinians can, and are willing to, interact freely with their Israeli colleagues. Equally, we hope for a time when Israeli academics can travel freely across the Middle East and engage their colleagues in the region. One-sided censure of Israel will not hasten such an ideal. Rather it will encourage the many, both within and without academe, who have never given up hope of destroying a small Jewish state. And yes, Israel

has a right to exist in the Middle East. Roughly half of its people are descendants of Jews who fled, or were expelled, from Arab countries, and who came to Israel penniless, but looked forward, and rebuilt their lives.

—Doron Lubinsky  
Georgia Tech  
Tubinsky@math.gatech.edu

—Paul Nevai  
Ohio State University  
paul@nevai.us

(Received September 9, 2008)

### Response to Deift, Lubinsky, and Nevai

I am writing to respond to criticisms of my “Opinion” piece in the letters above. First of all, my sincere belief is that assistance to and cooperation with the Palestinian universities is in the best interests of both the Palestinian people and the Israeli people. It saddens me that some people see this solely as a political matter and, in particular, a criticism of Israel. My actions are focused on what we, as mathematicians and educators, can do in a non-political way to help the situation. My personal view is that a long term guerilla-style conflict is going on and there have been times when I was sympathetic to Israel and times, especially when new settlements were made and old ones expanded, when I was not. It was in one of these latter times that I signed the Harvard-MIT divestment petition. But my plea now is to look beyond politics at the options which are open to us in our capacity as mathematicians.

Secondly, if we want to help, we certainly need to be clear what we are helping. Birzeit is and has been a center for intense political debate—a university in the midst of an occupation would not be serving its purpose if it were not. Yes, during the intifada, a handful of its students did succumb to the nihilistic lure of terrorism but it is my belief that the vast majority of its students are moderate and supporters of peace. For instance, in the latest student elections, Fatah won with a considerable majority.

Birzeit does its utmost to counter the effect of a violent environment on its students through education, cultural activities and positive engagements. They require all their students to complete 120 hours of community service. Birzeit has graduated many of the top people in Palestine today and, above all, is a place that brings hope for thousands of Palestinian young people in the midst of a frustrating and violent environment. Once again, my plea is to look beyond the anger and bloodshed of the past and ask whether, through student and faculty exchanges, we can help in a positive way.

—David Mumford  
Brown University  
david\_mumford@brown.edu

(Received September 12, 2008)

### Julia and Raphael Robinson

I found Carol Wood’s excellent review of George Csicsery’s film *Julia Robinson and Hilbert’s Tenth Problem* in the May 2008 *Notices* warm and familial (in the sense of the “mathematical family”). I especially appreciate her paragraph on Raphael who, as Chern once said to me, was a greatly underrated mathematician. Julia felt that same way, and she told me in the last month of her life that she was planning to take his work as the subject of her Presidential Address.

—Constance Reid  
constancereid@sbcglobal.net

(Received September 15, 2008),



## Noticed

This past summer *Science* magazine carried an article highlighting conclusions from a series of studies about mathematics education doctorates that have appeared in the *Notices*. The studies, by Robert Reys of the University of Missouri, present data about the imbalance between the relatively small number of mathematics education doctorates being produced and the large number of academic openings for people with such degrees. *Science* described the market for math education doctorates as “one of the hottest job markets in academia”. The article goes on to say, “The reasons for the seller’s market include a shortage of people entering the field, a growing demand by universities for their expertise as they become more involved in precollege education, a lack of consensus on how they should be trained, and a surfeit of other professional opportunities.” The article, “Departments scramble to find math education faculty”, by Jeffrey Mervis, appeared in the August 22, 2008, issue of *Science*. Reys’s most recent article on the subject, “Jobs in mathematics education in institutions of higher education in the United States”, is in the June/July 2008 *Notices*. (Due to an editing error, Robert Reys’s title was truncated in the June/July *Notices*. He is Curators’ Professor of Mathematics Education in the Department of Learning, Teaching and Curriculum at the University of Missouri.)