

assiduously separated my interactions with mathematical colleagues from personal politics, communication ceased.²

But this is not about politics. Mathematicians as world citizens can and should reject anyone's demand to be "with them or against them," and soberly get on with the business of pursuing cheaper but more rational methods to save civilian lives, whether it be in London, Bali, Nairobi, or New York.

4 Toward a Mathematical Theory of Counterterrorism

Contributors Bert Hartnell and Todd Sandler were writing about mathematics, counterterrorism and counterterrorism decades before it became "fashionable." But as Fred Roberts, director of DIMACS, has indicated, since 2001, tremendous amounts of information have been gathered regarding terrorist cells and individuals potentially planning future attacks. There is now a pressing need to develop new mathematical and computational techniques to assist in the analysis of this information, both to quantify future threats and to quantify the effectiveness of counterterrorism operations and strategies.

Progress on these problems requires the efforts of researchers from various disciplines such as mathematics, computer science, political science, and psychology. By having researchers from diverse disciplines come to one place to conduct their research, greater progress will be made in developing scientific and analytical tools to deal with the problem of terrorism. Hence, to facilitate the invention of new tools, the exchange of new ideas, and the dissemination of new results to users in the intelligence and law enforcement communities, we have endeavored to publish this volume.

Can mathematics contribute the way it did in World War II? The "war on terror" is a much more haphazard, unpredictable operation. In some ways the problems are more complicated: we generally knew, then, where the German panzer divisions were. But there are clear benefits to trying: mathematics can help take some of the guesswork out of the decision-making process (if only by replacing laypeople's guesses with mathematicians').

I do not know if the conference co-organizers, the other editors, or the volume contributors will agree with all, or even any, of the thoughts I have expressed above. But I believe they will all agree with me when I say that it's high time we chose brains over brawn: Against terror, beauty may succeed where brute force has failed.

² On November 18, 2001, as a result of the *Guardian* article, I was invited to be the second speaker at what was then the largest peace rally in the United Kingdom, with a crowd estimated at 100,000; amongst the other speakers were various Members of Parliament. On September 11, 2002, I was invited by BBC World News Television to discuss the issues in the article in special anniversary coverage live from Ground Zero in New York City.