Editorial

Dear Readers,

On 9 January 2016, Professor Peter Gavin Hall died¹, bringing great sadness to the mathematical community. For aside from his profound academic talent and contributions, he is remembered and missed for his immense and yet gentle generosity.

I did not know Professor Hall personally but his kindness and generosity is something that I recognise in many leaders of mathematics whom I have met, including most of my own supervisors as a PhD student, postdoc, and now lecturer. Here, I am tempted to list in gratitude these supervisors but will spare them the embarrassment. Each of these supervising leaders went out of their way to support and show kindness to me and to countless other students and colleagues.

This is not a natural and automatic state of affairs. Often, in other fields of research, leaders are neither kind nor generous.² Why is it then that mathematics seems to attract such kind leaders?

Assuming that this is actually true, it is perhaps a question best answered by anthropologists, sociologists, and psychologists. I will however offer a few amateur thoughts on the subject.

A popular caricature of a mathematician is that of a solitary and perhaps eccentric researcher, who lives more in inner worlds of abstract thought than in outer worlds of social interaction – interaction that the mathematician might struggle to navigate. This caricature is exaggerated, as are all caricatures, but I find that it reflects a strand of truth, about myself and perhaps most mathematicians whom I know. The abstract beauty and challenge of mathematics might often attract people who in some ways resemble the caricature. Working with mathematical problems can also lead you to be solitary and, given time and concentration on a particularly difficult mathematical problem, somewhat oblivious to the outer world, even eccentric. This is indeed one of the joys of mathematics, though sometimes a joy best enjoyed in moderation.

This solitude and diminished level of social interaction can make mathematical gatherings less fun and open than other social gatherings, but it also reduces the incidence of intrigue, backstabbing, and other harmful politics. We mathematicians might not be nicer than most but we are often less nasty.

Then there is a nicely contradictory aspect of mathematics. Not only is it an unusually solitary endeavour; it is also an unusually collaborative one. Mathematicians might not work together with others as much as in many other fields but strong collaboration nevertheless emerges from the basic agreement that we will not allow our mathematical creations to contain contradiction. Mathematicians will peacefully (if

¹http://www.ms.unimelb.edu.au/News/PeterHall.php

²Of course, not all leaders of mathematics are kind; the great genius Gauss was by many reports notoriously unkind.

perhaps uncomfortably) strive together to comb out contradictions until none are visible to anyone present, at which point everyone agrees that the mathematical result is correct and true.

This collaborative search for consensus and truth is relatively rare in academia, and it prompts mathematicians to work constructively together rather than in opposition. This diminishes conflict among mathematicians, and a good and generous collaborator is valued and rewarded by other mathematicians. As friends and families of mathematicians are often too aware, the search for truths can turn a mathematician into a stickler and nitpicker. However, these traits also promote honesty and correct and constructive behaviour. Mathematicians often just don't see the point of nastiness or of political game playing.

A leader can lead in many ways, good or bad, and power can corrupt. Given the trends of traits among mathematicians hypothesised above, a mathematical leader might then tend to lead with honesty, collaboration, kindness, support, and generosity.

Then again, these are just my private and amateur musings and I might be completely wrong! What are your thoughts on these matters? Please feel free to contribute to the discussion here in the comments section below this article. Indeed, using the newly added comments sections, feel free to comment on and discuss each of the articles in this and future issues of *Parabola*.

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