

Parabola Volume 41, Issue 1 (2005)

Dear Readers

The first issue of *Parabola* appeared in July 1964. This 'magazine' was published by the University of New South Wales under the editorial direction of senior academics from the School of Mathematics, University of New South Wales as well as Editorial Board members from Sydney University, the Australian National University, the NSW Department of Education and the Mathematical Association of NSW. The main focus of *Parabola* at this time was to provide mathematical problems and puzzles to challenge the 'insight, ingenuity and determination' of secondary school students 'to the limit'. The first issue of *Parabola* contained a letter of introduction from the then Vice-Chancellor of the University of New South Wales, Professor JP Baxter. The reasons for launching *Parabola*, as stated by Professor Baxter, are just as vital today as they were then:

"There is a world-wide shortage of both (scientists and mathematicians), particularly of mathematicians, which, if it is not met by the present generation of students, will continue to retard the rate of technological advance for many years to come."

"Mathematics is not only an important study in its own right, but is essential for a full understanding of almost all other sciences, physical and social."

"If it (*Parabola*) should succeed in introducing gifted students to the delights of mathematics and in inducing some to embark upon a mathematical career, it will have been a source of benefit, not only to the individuals thus affected, but ultimately to the community as a whole."

The particular role of mathematical problems in helping to achieve the above aims was emphasized by the first editor of *Parabola*, Charles Cox, who pointed out that the 'flash of inspiration after complete concentration', which is a prominent feature of mathematical problem solving, is part of the 'creative experience which transforms the career of a professional mathematician from merely a daily job (well paid and secure nonetheless) to a continual source of adventure and delight'.

Parabola has also published problems and solutions from the UNSW School of Mathematics Competition for Junior (up to and including Year 10) and Senior (Years 11, 12) secondary school students in New South Wales and the ACT for more than forty years. This competition is the longest running competition of its type in Australia. Each year about 1200 students participate and the UNSW Schools Mathematics Competition serves as one of the selectors for the Australian team in the International Mathematical Olympiad.

Problems remain a prominent focus of *Parabola* but over the past decade, in particular, there has been a strong record of publications of pedagogic articles on applied mathematics, mathematical modelling, pure mathematics, statistics and the history of mathematics. The purpose of these articles (which are all reviewed by members of the Editorial Board) is to inspire students about the timeless beauty, power and relevance of mathematics. That *Parabola* has continued for more than forty years is a testament to the dedication of a succession of Editors and Editorial Board Members from the School of Mathematics, UNSW, but none more so than Professor George Szekeres. Professor

Szekeres, who was appointed Chair of Pure Mathematics at UNSW in 1963, was instrumental in establishing *Parabola* and he has been a member of its Editorial Board, without interruption, since inception.

Parabola underwent a facelift in 2002 after the incorporation of The Australian Mathematics Trust as publisher and distributor. The new look glossy cover, the clear typeset pages and the wider distribution to secondary schools throughout Australia has helped to consolidate *Parabola* as an enduring publication. Looking ahead, we welcome the expansion of *Parabola* to the new *Parabola Incorporating Function* and we welcome the new members to the Editorial Board, Michael Deakin and Peter Grossman, formerly from *Function*.

Function's foundation came later than *Parabola's*, but its purpose was essentially the same: to provide quality exposition of genuine mathematics for students in the upper years of secondary school. It was published by Monash University, and its founder and first editor was Professor Gordon Preston. From its first issue in 1977 until its final independent appearance in 2004, it tried to achieve the goals of presenting to this target readership the flavour of mathematics, as practised at the frontiers of the subject, to extend the horizons of the students beyond the focus of the classroom, to set challenging problems that lay nonetheless within the power of readers to solve, and to keep members of its audience up to date with happenings in the mathematical world. The central focus was always the mathematics, not the other issues that (rightly) concern teachers of the subject. Over the years, it attracted many dedicated readers: students, teachers, and others who were simply enthusiasts for the subject. It published many excellent articles, as well as elegant solutions to difficult problems, and regular updates on the International Mathematical Olympiads and other such competitions. Sadly, spiralling costs meant that it ran at a substantial loss over its final two years, and it became impossible for Monash University to continue to subsidise it. Its merger with *Parabola* brings the benefit of becoming a truly national journal.

In recent years, there has been government response to the need to recognise the importance of mathematics and mathematics recruitment with large sums of monies entrusted to organizations with stated aims similar to our own. In this climate, it might be argued that there is no longer a need for *Parabola*. But *Parabola* remains the only peer reviewed mathematics magazine for secondary schools in Australia and the original aims of our predecessors more than forty years ago are arguably even more vital today than they were then. The fact that *Parabola* continues without any external financial support serves as a reminder that the need for greater mathematics enrichment remains.

BI Henry and MAB Deakin