

anyone, and he never showed the slightest impatience with my less purposeful meanderings—and yet he would not tolerate unfairness or injustice where it lay in his power to prevent or oppose them. Certainly he was a great man on whom we all could utterly rely, and we shall miss him very, very sincerely.

J. B. MORGAN

Thomas Arthur Alan Broadbent

When Mr. Quadling invited me to write this Obituary, my spontaneous remark was “But I feel so inadequate”, to which he replied “So are we all”. This scrap of conversation would not of itself be worth recording, except that it condenses, in instinctive form, the feelings of two Editor-successors who knew Alan Broadbent and loved him well.

Perhaps only those who had the privilege of personal acquaintance will see what I mean when I say that outstanding characteristics were absolute kindness and utter modesty, combined with complete authority and, when necessary, righteous wrath—a combination fully possible only when sympathy and integrity go hand in hand. Few men can have been more honest both in their thinking and in their speaking. We often talk about hating the sin while loving the sinner; it is certain that Alan Broadbent hated the sham while loving the shammer.

I begin at that end, since that is where much of his value to the Association seems to rest. As an *ex-officio* member of Council and committees, he helped to guide us by advice that was always cogent, definite and kindly. Gifted by a voice that was both incisive and warm, he could express himself with the clarity and brevity of a real master of the English language. I remember, for example, impassioned pleas for the fuller incorporation of the young into the affairs of the Association.

His knowledge of the membership of the Association was extensive. For some years I acted as Chairman of our Programme Committee, of which he was a member. He always had names to suggest, and could immediately give a thumb-nail sketch (positive or negative) of anyone proposed for lecture or discussion. It was typical, too, that we usually met under his hospitality at the Royal Naval College at Greenwich.

‘T.A.A.B.’ edited *The Mathematical Gazette* from 1931 to 1955, making an outstanding contribution to mathematical journalism for the teaching profession, and to the whole reputation of the Mathematical Association in particular. It is inevitable, but sad, that many of our present members did not see him in action and, indeed, that they may now have few chances of being able even to turn up his own major contributions. But all who can should read (or re-read, or even re-re-read) at least his article “*The Mathematical Gazette*, Our History and Aims” in No. 291 (1946) and his Presidential Address “Printer’s Ink and the Teacher” in No. 324 (1954). Quite apart from the content, the pure pleasure of reading lucid, nervous English will be an experience in itself.

Examples abound to illustrate Broadbent's style; I start with two, from "Our History and Aims", that will surely please the present editor:

"It is not a compositor's job to expound informal abbreviations (though it is a point of honour with him to decipher even the vilest of handwritings); it is not his function to turn into decent English such slipshod and undignified phrases as

$$\therefore \text{Eq.} = \odot'.$$

If a manuscript contains symbols and groups of symbols which are easy to write, but ugly and costly to transfer to type, the compositor must nevertheless reproduce them."

"The suggestion that there is too much high-brow material in the *Gazette* causes me more anxiety. But some of the blame, if there be any, lies on the shoulders of members themselves, since it is not unreasonable for an editor to confess his inability to publish those contributions which he never receives."

And a quotation from the Presidential Address (included because it also gives insight into Broadbent's relationship with his pupils):

"For many years I have made a habit of criticising severely the English used by my pupils; I have dealt with any lack of clarity or precision by abuse, ridicule, contempt, whatever mode of severe rebuke seemed most fitted to the offence and to the personality of the offender. Of course I suffer. My pupils soon learn to apply to me the canons by which I judge them; the slightest ambiguity in an examination question is detected and denounced, a lapse into jargon at the blackboard is pilloried without mercy. If in a moment of stress I endeavour to excuse myself by saying, 'Well, you know what I mean', the excuse is not accepted; they reply, 'Of course we do, but that is no reason why you should not say what you mean'."

As Editor, I came to regard 'T.A.A.B.' as Reviewer Extraordinary. He was one of the few who would accept books in French and German, and the range of topics on which he could write relevantly was great. Towards the end of my Editorship we had a nearly-established convention that, without seeking his prior agreement, I might send him anything that I was uncertain how to place elsewhere. In addition to 'straight' mathematics, some of the books he reviewed were:

1971: R. Mapes, *Mathematics and Sociology*.

H. E. Huntley, *The Divine Proportion. A Study in Mathematical Beauty*.

J. L. Castle, *How not to lose at Poker*.

1970: S. K. Stein, *Mathematics, the Man-made Universe*.

C. Lucaks and E. Tarján, *Mathematical Games*.

- 1969: A. Grunbaum, *Modern Science and Zeno's Paradoxes*.
M. E. Bowman, *Romance in Arithmetic*.
- 1968: C. N. Srinivasiengar, *The History of Ancient Mathematics*.
F. Klein, *The Mathematical Theory of the Top*.
L. C. Jain, *On the Jaina School of Mathematics*.

These examples, a small selection of his reviews over the last five years (for which most readers will have access to copies), indicate the scope; but the reviews themselves must be read to convey the penetration of a well-stored mind. For books on classical mathematicians like Newton, Gauss, Painlevé, 'T.A.A.B.' was almost self-selecting.

All this could never have been accomplished without the companionship and support of his wife, whom he married in 1930 and who thereby became the wife of one of our Presidents as well as the sister of another, Sir William Hodge.

One or two biographical notes may conclude an obituary which, one feels, has been and must remain obstinately inadequate. He was born in 1903 in Consett, Co. Durham, where his grandfather had been a Methodist minister. He went to St. John's College, Cambridge, as a scholar in 1921 and attained a First Class in both Parts of the Tripos, with a star in Schedule B. He started research under Professor J. E. Littlewood, but his heart was more in the teaching of his subject. After a time at Reading, where the influence of Professor E. H. Neville was invaluable, he went as Assistant Professor to the Royal Naval College, Greenwich in 1935, succeeding Milne-Thomson in 1956 as Gresham Professor of Geometry there. He retired in 1968. He was also a valued member of the London Mathematical Society; he served that Society on the Council, as a Vice-President, and (1937-63) as an Honorary Auditor.

Our sympathy goes to Mrs. Broadbent and their two children, coupled with deep gratitude for all that they enabled him to do for us.

E. A. MAXWELL

In recognition of his 25 years service as Editor of the *Gazette* a memorial to the late Professor T. A. A. Broadbent is being established in the Library. His son and daughter have generously given their father's complete run of *Gazettes* from 1922 to 1972 and donations are invited from those who knew Broadbent to establish a small fund to defray the cost of binding. A list of donors will be kept with the books. Donations should be sent to the Librarian, Professor R. L. Goodstein at the University of Leicester.