

INTRODUCTION

MEMORIES OF BRUCE CHOPPIN

By David L. McArthur:

This special issue contains a selection of papers by a most interesting man, Bruce H. L. Choppin, with whom it was my pleasure to share an office and a rewarding friendship during his last years.

Bruce was born near London in 1940. After teaching mathematics and physics in English high schools, he received his BA in Pure and Applied Mathematics from the University of Cambridge in 1962. This was followed in 1963 by a Certificate in Education from the same institution. Bruce moved to the University of Chicago that year to join the Department of Education MESA program as a graduate student and staff associate. He completed his PhD in Measurement, Evaluation and Statistical Analysis under Benjamin Wright in 1967.

Bruce spent a year as Assistant Professor of Education at Cornell, before taking a two-year post as Technical Research Officer for the International Association for the Evaluation of Achievement (IEA), an organization with which he was to keep a professional affiliation until his death. In 1970 he took a two year UNESCO-sponsored consultancy in testing and evaluation at the Israel Science Teaching Center of Hebrew University, Jerusalem, and then moved to the staff of the National Foundation for Educational Research in England and Wales (NFER), where he was Principal Research Officer until 1978, and Assistant Head of Research until 1981. The last appointment Bruce completed was as Senior Research Educationist with the Center for Study of Evaluation, a research organization at the University of California, Los Angeles. He was on his way to a new appointment as Senior Lecturer at the Institute of Education in Singapore at the time of his death.

Bruce served as co-editor with T. Neville Postlethwaite of this journal from 1977 and was section editor of all articles on evaluation and assessment for the *International Encyclopedia of Education: Research and Studies*. From 1974 to 1979 he served as Treasurer of the British Educational Research Association, and during 1980 and 1981 as the Association's President. He served as Chairman of IEA's International Project Council on Item Banking from 1979 until his death.

At NFER he contributed important papers on item banking and Rasch modeling while directing over a dozen separate projects in educational measurement and evaluation. At UCLA he directed both basic and applied studies in the methodology of testing. Not only was he an excellent conceptualizer of problems and solutions in educational research, but he was also adept at translating his thoughts in psychometrics and statistics onto his personal computer. He would arrive at the office we shared at UCLA after a successful night's tinkering, eager to demonstrate new programs. He was keenly interested in questions of science as well, frequently pursuing some thread of knowledge through the recent science literature simply for the fun of it. But his leading interest during his professional years was undoubtedly international consultation: he conducted seminars in educational measurement and research in East and West Africa, Israel, Finland, Germany, Iran, Australia, and Indonesia, among other places, and his enthusiasm for international education, particularly for tackling the genuine problems of

delivering and assessing education in non-Western countries, was very strong.

Bruce was headed around the world, eastbound from Los Angeles to Singapore, consulting in a variety of settings, at the time of his sudden death in Santiago, Chile on July 15, 1983. He leaves his wife Rachel, his son Corin, and a great many students, teachers, and friends around the world.

By Neville Postlethwaite:

It was in 1963 that I first met Bruce Choppin. I was in Ben Bloom's office at the University of Chicago. A figure passed the open door in the corridor. Ben raised his voice, asked him to come in, and then introduced me to a new student in the Measurement, Evaluation and Statistical Analysis program commonly known as the MESA program. The new student - from England, also my home country - was Bruce Choppin. During my frequent subsequent visits to Chicago we met often.

I was much impressed by Bruce's perspicacity in the choice of statistical analysis for different educational problems. Many hours were spent discussing these issues, both in general and in particular. I was involved in the International Association for the Evaluation of Educational Achievement (IEA) and Bruce was interested in its work. Indeed, Bruce analyzed the England data set of the first IEA mathematics study in 1965. As Bruce became more involved, he and I discussed the work of IEA, its future thrusts and the consequences of particular procedures on many occasions. After I became Chairman of IEA in 1978 it was marvellous to have Bruce as a friend on whom I could rely to give his straight reactions to my ideas. Bruce had a great deal of research experience in the USA, England, and several African and Asian countries. He knew how different researchers thought, how different research institutions were structured, and the different types of problems they typically experienced. His wisdom on these matters was invaluable.

We taught many research and evaluation courses together in England, in France, in Tanzania, in Nigeria, in Indonesia, and in Thailand. Bruce could be an extremely lucid and structured teacher - whether it was Analysis of Variance or Rasch scaling. After his death, I received letters from former students of Bruce paying tribute to his kindness and patience, and to his great willingness to share his knowledge. The appreciation was overwhelming.

As a person Bruce was always kind but in academic work with colleagues he did not suffer fools gladly, especially if they were in senior positions. His barbed remarks occasionally perturbed those senior colleagues who had arrived at their positions on grounds other than research ability. On the other hand, many researchers greatly appreciated his skills and help.

Bruce was a "bon vivant", we spent many many evenings enjoying good food and wine in very different countries. In particular, I shall never forget our evenings in Indonesia.

I shall not say anything more about his academic work. The contents of this monograph bear witness to that. But let me end by saying that one year after his death, I still miss Bruce very much - his advice, his quick mind, and his true friendship.

I am writing this in the room in St. Albans, England, where Bruce and I last saw each other!

By Alan C. Purves:

I cannot precisely remember when I first met Bruce Choppin, but I suspect it was in Chicago in 1965 at the meeting of the IEA mathematics study, which I visited for two days. It was not until later, after the Six-Subject survey began in earnest, that I really came to know him. We were flying from Chicago to London, and Bruce set out to demonstrate his experience as a traveller. At Heathrow I proposed taking the bus, but he said there was a cheaper way. We took a taxi to a pub not far from the airport (much to the driver's annoyance), had a cup of coffee, and then he called another cab to take us to NFER. The whole, I believe, took longer and cost more than the bus, but I was impressed because Bruce handled the whole business with a delightful combination of mystery and humor.

That combination served him well when he worked with the literature committee of the Six-Subject survey. What impressed the committee was the fact that Bruce was not just a psychometrician; he appeared genuinely interested in what we were doing and sought to understand our various problems. The measurement of performance in literature was novel at

that time, and there were many substantive issues.

On one occasion we were split as to whether one could make any meaningful measure of the comprehension of a literary text using multiple-choice items. I believed we could but my colleague, James Britton of London University, doubted it. Bruce proposed that we should settle the issue empirically, and he designed what came to be known as the "cross-over study". The matter became so controversial that we had a bet on the outcome - a bottle of scotch. Bruce and I won. He also helped us enormously in testing the issue of whether we could use comparable poems across languages and thus avoid translation - we could not. We could, however, use short stories.

Our paths crossed only occasionally in the years between 1971 and 1980 when the IEA writing study got underway, but each time we met it was as if we had seen each other the day before. Bruce was always one to look at an issue from a broad perspective rather than simply a technical one. We once had a marvellous discussion of what a strict Marxist interpretation of the IEA data would look like, and we conjured up some memorable conclusions that might emerge.

During the early 80's Bruce and I came into closer contact. He agreed to be sampling referee for the written composition study and did a superb job - as usual. We also talked a good bit about the International Encyclopedia of Education as well as about less weighty issues. What came to impress me most in these last years was Bruce's new maturity. This displayed itself most conspicuously at meetings of the IEA General Assembly. Bruce had an amazing sensitivity to cultural and national differences, particularly as they would manifest themselves at a meeting conducted, for many, in a foreign language. Often he would make a point on behalf of someone less articulate in English than he, and one could notice the relaxation of tension after he spoke.

I shall not forget the day in 1983 when I received a call from Cristina Rodriguez. I was about to leave work when the phone rang and the first words I heard were: "Alan, Bruce is dead". We had planned to meet the week before, but he could not make the appointment, so that I knew instantaneously who she was talking about. I was stunned and then felt as if a piece of my life had been wrenched away. It was a precious piece for me, and I am glad to have the memories not simply of the work, but of the man behind the work.

By Benjamin D. Wright:

No one who collaborated, debated or feasted with Bruce will forget him. He was (and goes on being in my mind) a unique, endearing, frustrating, invigorating combustion of rich wisdom and reckless courage, deep tenderness and relentless determination, fluid ingenuity and pigheaded stubbornness. When I first met him, in 1963, he was speaking for his supper (and schooling) to small town reactionary Rotarians - on Marxist internationalism!

Bruce was my first "Rasch" student and he helped me write some of the first computer programs for Rasch estimation. Looking back today at those 1964 programs, I find nearly everything that has been "invented" since, including good clean versions of the conditional, unconditional and pairwise algorithms, not only for right/wrong data but for rating scale data as well. Much of this work was reported to a large, if somewhat mystified, audience at the Spring 1965 meeting of the Midwest Educational Research Association. Bruce was an accomplished speaker and he did his part with éclat. I still have his handouts.

Bruce was in at the beginning of the "Rasch" psychometric revolution. In the summer of 1965 he and I sat for a month of mornings before the blackboard installed for our education in the spare bedroom of Georg Rasch's house in Holte while that crafty old wizard gave us lessons on how useful math could be and what measurement was all about. But when it came time to write a thesis, Bruce could not be persuaded to use his good work on the Rasch model. Oh, no, that would be too easy. Bruce was on the verge of world leadership in an important new psychometry, so he addressed his doctoral thesis to a grand, if incomplete, attempt to develop objective analyses of the psychology implied by the class themes of high school students. It was a magnificent but overwhelming project. Bruce earned his doctorate though the project he had in mind was barely begun. I still have the computer files and programs Bruce left two decades ago, "just until I can get back to them".

In the summers of 1968 and 1969 we spent happy days driving over Jutland, riding island ferries, exploring Danish lunches and beers, and arguing the "true" necessities of measurement and the relative merits of alternative estimation procedures. Bruce loved to argue. Debate was his metier.

Bruce was also a grand host. I spent many Septembers with Bruce and Rachel and later his interesting son, Corin, at their London home in Raynor's Lane. Bruce loved cooking and eating. He was a prodigious gardener and raised heaps of delicious tomatoes. He loved the theater and we went to innumerable plays together. Stoppard was a favorite and he made sure I saw every Stoppard play presented.

When Bruce determined to leave NFER and England, his friends everywhere were worried for him and sad. There was so much good work there for him to do and he had such insight into what needed to be done and how to do it. But the politics wore him down; he wearied of the endless empty teapot tempests that hobbled the NFER and DES educational research programs. When his friends tried to change his mind he said, "The way things are, I'd rather be dead than stay in England".

Dwell not on those grim words.

My favorite memory of Bruce is lunch at Bertorelli's. We met at one for a "quick" lunch. We had other things to do. But the food and wine were unusually good and we got planning and outlining and inventing, and the afternoon wore on. Bertorelli's always treated its customers well. Even after the place was empty, the other tables cleared and the shades drawn, they brought us more coffee and brandy. And we continued to talk about science and measurement until a supper customer startled us. It was after five! That's how interesting Bruce was. That's how much I miss him. That kind of remembering is how I keep him with me.