# Remembering Jay S. Birnbrauer

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Professor Jay Spencer Birnbrauer peacefully passed away on November 1, 2017, aged 83, in Perth, Western Australia. Known to his friends and colleagues in Australia as 'Birny', he was a pioneer of applied behaviour analysis on both the Australian and world stage. He contributed to the development of behaviour-analytic technology for children with intellectual and developmental disabilities in the 1960s and played a central part in the formation of the Australian Behaviour Modification Association (known today as the Australian Association for Cognitive and Behaviour Therapy) in the 1970s. He was a purist in the field of applied behaviour analysis (ABA) and was relentless in his efforts to see ABA being provided to children with a developmental disability and their families. Birny's influence in Australia, and particularly Western Australia, was mainly imparted through his role with the Master of Applied Psychology program at Murdoch University. His most widely known piece of work, the Murdoch Early Intervention Program, was an early and important replication of Lovaas's evaluation of early intensive behavioural intervention for children with autism. Birny contributed significantly to our field and to many people's lives. He is remembered often and fondly by his many friends and colleagues.

■ *Keywords:* Applied behaviour analysis, Disability, Autism, Behaviourism, Murdoch University faculty

Professor Jay Spencer Birnbrauer peacefully passed away on November 1, 2017, aged 83, in Perth, Western Australia. Known to his friends and colleagues in Australia as 'Birny', he was a pioneer of applied behaviour analysis on both the Australian and world stage. He contributed to the development of behaviour-analytic technology for children with intellectual and developmental disabilities in the 1960s and played a central part in the formation of the Australian Behaviour Modification Association (known today as the Australian Association for Cognitive and Behaviour Therapy) in the 1970s. However, despite being a very accomplished tenor in numerous choirs, he was not simply entertaining people on the behaviour analysis stages. He was a purist in the field of applied behaviour analysis (ABA) and was relentless in his efforts to see ABA being provided to children with a developmental disability and their families. His intelligence, humility, and humanity improved a great many lives, and he was highly respected by all those who knew him.

Birny's life can perhaps best be viewed in two separate halves — the first half in the United States and the second in Australia — although the separation between the two was never distinct. Birny was born on December 31, 1933 and grew up in

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the suburbs of Philadelphia. He left home in the mid 1950s to go to the College of William and Mary in Virginia, and it was while there that he read Skinner's (1953) book, *Science and Human Behavior*. This book had a profound influence on him; he said he was immediately sold on Skinner's philosophy of science for psychology (known as radical behaviourism) and the scientific methods Skinner proposed for studying learning and behaviour.

After finishing college, Birny enrolled in a clinical psychology program at Indiana University in 1958. Although Skinner was no longer on faculty at Indiana University in the 1950s (he had chaired the Department of Psychology there from 1945 until 1948), Skinner's famous and lively debates with Hullian psychologists (e.g., Bijou, Ellson, & Verplanck) and inter-behaviourists (most notably J.R. Kantor) in that department had established a bastion there for psychological research that took a natural science approach to behaviour. Birny indulged his interest in philosophical issues while walking in the shadows of some of psychology's heavyweights. He also learned how to conduct tight, within-subject research while enrolled in this department. After finishing his clinical internship, he began his PhD research, studying principles of discrimination learning in children with intellectual disability. His experiments were among the first to study learning in humans using the same methods that Skinner and others were using with non-humans.

Birny commenced his first full-time job at the University of Washington in Seattle in 1960. Professor Sidney Bijou — a child psychologist — hired him as an assistant professor for his new research group. Bijou had been at Indiana University with Skinner from 1946 until 1948; in fact, Skinner reportedly hired Bijou to direct, and bring an experimental-learning approach to, the clinical program there (Morris, 2012). According to Birny, Bijou probably liked their shared history at Indiana, their mutual interest in Skinner's philosophy and research methods, and his cynicism for the utility of mainstream clinical psychology at the time. Just two years earlier, Bijou had recruited another psychologist for his research group — Donald Baer. Together, Bijou, Baer, and Birnbrauer became known to faculty and graduate students as 'the three Bs'. (North Americans might now call them 'the Killer Bs' of ABA after the string of successful baseball players that played for the Houston Astros from the mid 1990s through to the early 2000s.) In hindsight, the program of research that the three Bs established in just a few years at the University of Washington might be regarded as the 'Big Bang' that heralded the beginning of the establishment of the field of ABA. Thus, one could say that the three Bs (Bijou, Baer, and Birny) produced two Bs (a Big Bang).

In the early 1960s, Bijou wanted to establish at the University of Washington a program of research that took a new (behavioural and experimental) approach to studying child development. Rather than simply describing how general features of a child's behaviour changed as they aged (as most developmental psychologists were doing), Bijou wanted to use Skinner's methods and philosophy to develop interventions by which psychologists could help children who were not developing normally. Thus, if children were not learning to speak, to care for themselves, or to display sufficient prosocial behaviour, his research group would find ways to teach them those skills. Bijou called his group the 'Institute of Child Development' (ICD). It was later called 'The Child Development Lab'.

Bijou tasked Birny with developing an 'experimental classroom' for children with autism and intellectual disability — the so-called 'unteachable'. (Note that 'experimental' here is meant to imply both trialling a new system and the adoption





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of a research focus when attempting to teach people.) The classroom was to be at Rainier School, a state school in the countryside an hour's drive from the University of Washington. At this time, most children with pervasive learning disabilities were sent to institutions located in the hinterland outside major cities in the United States. It was there that Birny researched and developed methods for using token rewards to motivate students (Birnbrauer, Wolf, Kidder, & Tague, 1965), and methods for teaching academic skills in a way that minimised errors and ensured high rates of success (called 'programmed instruction'; Birnbrauer, Wolf et al., 1965).

Over the next five years, the three Bs were joined by other psychologists at the ICD, and many of these people also became pioneers of ABA. Among others, they included Montrose Wolf (who developed methods for training parents to manage problem behaviour in their children), Todd Risley (who conducted ground-breaking research into parent involvement in a child's learning of language; Hart & Risley, 1995), and Ivar Lovaas (who went on to develop Early Intensive Behavioural Intervention for children with autism; Lovaas, 1987). In one of the first significant publications by staff at the ICD, Bijou and Baer acknowledged the contribution of others, stating '. . . we are particularly indebted to Jay Birnbrauer . . . and O. Ivar Lovaas' (Bijou & Baer, 1961, p. vi).

Birny's first publication appeared in *The Bulletin*, a publication of the Washington State Division of Mental Health Division of Institutions (Birnbrauer, 1963). It was titled 'An application of reinforcement principles to retardate education'. Other publications appeared in early editions of such journals as *Journal of the Experimental Analysis of Behavior*, *Mental Retardation*, and *Journal of Experimental Child Psychology*. Some papers reported basic research (e.g., 'Some multiple schedule effects in retarded adolescents'; Birnbrauer, 1964) while others reported applied research (e.g., the validation of programmed instruction methods for teaching intellectually disabled children to read; Birnbrauer, Bijou, Wolf, & Kidder, 1965). Thus, some of his research could be classified as the experimental analysis of behaviour and some as applied behaviour analysis. He began to practise ABA, and to train others to do the same much later in his career, but we suspect he would have protested about the distinction between research and practice we are implying here.

Unfortunately, the University of Washington's psychology department that hosted the ICD did not embrace the Institute members' success and, after five years, the three Bs and others went their separate ways (Baer, 1993; Horowitz, 2002). Baer, Wolf, and Risley went to the University of Kansas where Baer had been given an opportunity to transform the Home Economics Department into the Department of Human Development and Family Life. Bijou left to chair the Psychology Department at the University of Illinois in Chicago, and Birny was offered a faculty position at the University of North Carolina at Chapel Hill.

In Kansas, Baer and his colleagues replicated many distinguishing features of the ICD in Seattle. Of perhaps more significance though is that they founded the *Journal of Applied Behavior Analysis* and published, in the journal's first issue, an insightful blueprint for ABA that is still just as relevant today as it was back then (Baer, Wolf, & Risley, 1968). Birny also contributed a paper to this first issue (Birnbrauer, 1968) and went on to serve on the editorial board for several years. Applied behaviour analysis became a defined field upon the publication of this journal. Thus, a planet was born from the Big Bang.

Staff at the University of North Carolina had learned of Birny's 'experimental classroom' at Rainier School in Washington and wanted him to replicate this approach





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at the Murdoch Centre — again, a state-run school in the countryside, an hour's drive from the university. The mid 1960s was at a time when federal and state legislatures in the United States were actively seeking to present African Americans with the same employment opportunities as White Americans. Birny trained any interested employee at the Center how to teach the skills the children needed, how to take data on their teaching, and how to use research designs to refine their teaching methods. He effectively created behavioural technicians out of carers, gardeners, and — perhaps — janitors too.

In 1970, Birny accepted a year-long sabbatical at the University of Western Australia (UWA) in Perth. Professor Aubrey Yates in the Department of Psychology at UWA had asked Baer for a recommendation of someone working in the area of disabilities and Baer suggested Birny. Birny often spoke about how much he enjoyed that sabbatical leave even though Yates was a 'behaviour therapist' of the Wolpe tradition and was not following the principles that were recently described by Baer et al. (1968). Birny subsequently returned to UWA for a further two years between 1973 and 1975, when he made a lasting mark on the history of psychology (both academic and practice) in Australia. Following this period at UWA, he returned to the United States without a job lined up but instead to help a close friend through a terminal illness. Of course, he was picked up by administrators trying to better serve children with pervasive learning disabilities. This time he was appointed as the Director of Research and Training at the DeJarnette Center for Human Development in Staunton, Virginia. (We don't know, but he might well have created this title for himself because most other people would not have juxtaposed 'research' and 'training' in a position title.) Unfortunately, his friend died only two years after his return to the United States, and Birny felt constrained by his supervisor, so he began searching for another job. As it happened, Murdoch University in Perth had just been established and they were recruiting academic staff for various departments. Perhaps he was lured back by the climate. Perhaps he felt he had unfinished business in Australia. We cannot be sure, but Birny was, so he accepted a position as associate professor in psychology at Murdoch University in 1978, where he was to spend the rest of his career. On his retirement in 1998, after 20 years of service, he was made an honorary fellow.

Birny always stressed that there were others promoting behaviour analysis in Australia (and New Zealand) before he arrived, particularly in the eastern states (New South Wales and Victoria especially). But there is no doubting his influence in building on this small and somewhat fragmented beginning. In his teaching, research and conference presentations, he promoted the work done in the United States by pioneers like Bijou, Baer and Risley as an alternative to the Wolpe-inspired behaviour therapy that the majority of Australian and UK researchers and clinicians were using. He also regularly facilitated visits to Australia by some leading behavioural researchers and clinicians from the United States. As a result, he indirectly forged relationships between behaviour analysts in the United States and behaviour analysts Down Under. However, perhaps his most significant achievement was to rally the troops in Australia — to bring like-minded professionals in Australia together so that mutual reinforcement of behaviour-analytic behaviour might occur. In 1974, at the 9th Annual Conference of the Australian Psychological Society, he convened a meeting in Perth for those interested in 'behaviour modification', and it was this meeting that gave rise to the Australian Behaviour Modification Association (ABMA; Birnbrauer, 1994). The formation of this association was critical for the development of ABA in Australia. In 1985, he published a staunch defence of ABA in the third edition of the





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ABMA's journal *Behaviour Change* (Birnbrauer, 1985). Three years later, in 1988, he became the editor of this journal.

Birny's influence in Australia, and particularly Western Australia, was mainly imparted from his position at Murdoch University. His principal influence was through his role with the Master of Applied Psychology program at Murdoch. This program was unique in having multiple streams, including Clinical Psychology and Educational Psychology. There was a strong overlap between these two streams and in them appeared a focus on developmental disabilities, particularly the treatment of autism. Students were taught about radical behaviourism, principles of learning, and the research and practice principles of ABA when they completed a placement in the disability field. There is no doubt that many of Birny's students went on to improve the quality of state- and privately funded services for this population.

Those practitioners working in the disability field who graduated from universities other than Murdoch were sometimes taken under Birny's wing and invited for individual supervision. As a newly graduated psychologist, I (T.M.) recall Birny generously inviting me to his office at Murdoch to discuss my work and, on later occasions, inviting me to dinner to meet academics who were visiting him from the United States, and to his home to view videos about the contributions of key figures in the field of behaviour analysis.

During the 1980s, Birny also directly influenced policy through membership of important advisory committees, including the Western Australia Advisory Committee on Intellectual Handicap and Association for Autistic Children. He contributed to numerous reviews of policies and services for these organisations. During this time, he also wrote conceptual articles and gave seminars at conferences about a behaviour-analytic approach to understanding and solving social problems. For example, a chapter he wrote for a book on ABA was titled 'Responsibility and Quality of Life' (Birnbrauer, 1990).

Birny's most widely known piece of work was called the Murdoch Early Intervention Program. In 1987, Birny's long-time friend and ex-colleague from the University of Washington — Ivar Lovaas — published findings in the prestigious *Journal of Consulting and Clinical Psychology* about a treatment regime (namely, early intensive behavioural intervention; EIBI) that achieved impressive success normalising children with autism. Through the application of laboratory-discovered learning principles in intensive teaching sessions for around 40 hours per week, 50 weeks per year, and over two years, nearly half of the children they taught learned so many verbal and social skills that they no longer met the diagnostic criteria for autism (Lovaas, 1987). Lovaas's article stimulated considerable debate, and there were calls by skeptics for independent replications to be conducted. Birny and his colleague David Leach at Murdoch University took up the challenge and completed the first such replication (Birnbrauer & Leach, 1993). Although funding limitations meant that they were unable to recruit and train sufficient volunteers to achieve the same level of treatment intensity that Lovaas's group had provided, their results were largely a vindication of Lovaas's claims. Their study also ended up populating Western Australia with practitioners who had been trained in EIBI by Birny, Leach, and Lovaas. We are aware of many children in Perth who have benefitted from the services offered by these practitioners.

Early in 1994, *Behaviour Change* published an article by Birny reviewing 20 years of ABMA since its inception in 1974. The article concluded with this statement; 'Changes and trends will constitute Part 2 of this paper which will be presented at the





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17th Annual Anniversary Conference in 1994' (Birnbrauer, 1994, p. 81). However, in 1995, the growing popularity of cognitive therapies amid members of ABMA led to a change of name and emphasis of the organisation, and the ABMA became the Australian Association for Cognitive and Behaviour Therapy (AACBT). Birny and many others were disgruntled by this shift in focus because radical behaviourists usually challenge the utility of granting causative status to thoughts and feelings; instead, they simply constitute more behaviour (albeit covert behaviour) to be explained. Despite this change of focus and name, the name of the association's journal — *Behaviour Change* — was retained, and the AACBT preserved its roots by continuing to provide a home for behaviour analysts. For example, until 2014, the AACBT was the only professional association in Australia that was affiliated formally with the Association for Behavior Analysis International (ABAI). (In 2014, the Association for Behaviour Analysis Australia was established and is now the second organisation to be affiliated with ABAI.)

Birny continued to participate in and present at AACBT conferences until quite recently. (For example, he was a participant in a panel discussion at the 30-year anniversary program in his home town of Perth in 2004.) However, his real home was the annual ABAI conventions on the Memorial Day long weekend in the United States. I (A.R.) accompanied him to several of these in the late 1990s and it was there he introduced me to another world. During these visits, I rapidly became aware that Australia had not really grasped the true treasure that we had acquired. Birny was known, admired and respected, and his contribution to the field of behaviour analysis was acknowledged at a level that was not really evident here in Australia.

Birny often said he always wanted to help people with valuable and practical solutions to problems that involve someone's behaviour. He ended up helping the 'unteachable' and then helping others who also wanted to help these people. His fascination for behaviour analysis combined with both his motivation to help others and with his education and training to advance and promote the uptake of behaviour analysis in Australia.

As well as a towering intellect, Birny was a generous, warm, and humorous man who sensed a responsibility to help where he could. He had a passion for music and sang with the UWA Choral Society, Western Australia Symphony Orchestra Chorus, madrigals, and other groups. He frequently travelled, was a regular bridge player, went sailing, and routinely swam at Cottesloe Beach on most mornings of the year. He was a long-standing and committed member of the Greens political party, served as a Cottesloe City councillor, and was a generous volunteer and benefactor to Oxfam. Birny was involved in social issues at many levels and had extensive networks of friends. His life was a life well lived. He contributed significantly to our field and to many people's lives. He is remembered often and fondly by his many friends and colleagues.



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