

Edward (Ted) Carr – A Life Worth Living

Friends and admirers of Ted Carr from Stony Brook University were shocked and saddened by the news that he and his wife (Ilene Wasserman) were killed by a drunk driver not far from their home on Long Island on Saturday June 20th 2009. Most knew Ted through his many influential publications and some were fortunate to hear him speak – typically one of the most thought-provoking as well as entertaining speakers at any conference. Summing up such a productive and influential career is difficult, but Ted would certainly advocate that context is essential to understand anyone’s behavior, so it is fitting to begin with some of his background.

Ted grew up in Toronto, Canada in a typical middle class home. Several early stories about his childhood are revealing and seem to hold keys to understanding his later development. For example, he once shared a humorous but telling prank he pulled on his mother. One day she was outside a second story window of their home on a part of the roof, presumably washing the windows from the outside. A young Ted – perhaps 3 or 4 years old – was just inside watching her when something prompted him to close the window. As he told this story you could picture his devilish grin and the joy he must have experienced with his accomplishment. Unfortunately, his mother couldn’t open the window and was now trapped on the roof. This so upset him that he cowered in the corner of the room, feeling powerless to help her. Finally, his mother caught the attention of some neighbors and they were able to get her back inside. When he told me this story we both laughed and I remarked, “She must have really punished you for that one!” He smiled ruefully and said, “In her eyes I could never do anything wrong.” This type of support and unconditional regard undoubtedly contributed to his later courage and confidence, helping him break new ground in his research and writing. He also shared how his family had few books at home, but that a neighbor opened his home library to him and he was introduced to many of the great literary works. This was just the beginning of his insatiable thirst for new ideas.

Ted started his graduate career doing operant conditioning research on pigeons with George Reynolds (a student of B.F. Skinner) at the University of California, San Diego and he received his Ph.D. in 1973. However, it was his post doctoral work with Ivar Lovaas at UCLA that would lay the foundation for his later work in autism. During his time at UCLA he met and worked with other pioneers in the field, including Bob Keogel, Laura Schreibman and Creighton (Buddy) Newsom (who passed away last year) and conducted research at Camarrilo State Hospital. He later contributed to the “lab manual” which most will recognize as the “Me Book” that served as the protocol for early intensive behavioral intervention efforts for years to come (Lovaas, 1981). He spent the rest of his career at Stony Brook University, becoming an assistant professor in 1976 and ultimately earned the rank of Leading Professor in 2000.

This was a productive time and his experiences led to his publishing a seminal paper in *Psychological Bulletin* that outlined behavioral views of self-injurious behavior (Carr, 1977). It is difficult to overestimate the importance of this paper. At the time of its publication, the field of applied behavior analysis had no generally accepted model for conceptualizing self-injurious behavior (as well as other disruptive behaviors). The *de facto* view of these behaviors was simply that they were excesses to be

reduced. Ted's paper, which synthesized the importance of a growing empirical base, articulated how these behaviors could serve different functions such as to gain the attention of others (based on the pioneering research of Ivar Lovaas) or to escape from unpleasant situations. This latter concept of escape from demands was demonstrated in experimental analyses conducted by Ted and his colleague Buddy Newsom, a collaboration that would prove to be highly meaningful for the field (Carr, Newsom, & Binkoff, 1976, 1980).

The first time I ever met Ted was an incredibly disappointing experience. I was a new graduate student in clinical psychology at Stony Brook and applied to work with him based largely on his *Psychological Bulletin* publication. A few days before classes started in September 1980, someone pointed out that he was the young professor coming out of the psychology building. I hurried over and introduced myself and told him I was anxious to get started doing research with him on problem behavior. I wanted to take the research on different functions of behavior and design matching interventions. He gave me a quizzical look – something that would happen many more times over the years – and said that he was no longer doing research in that area. Instead, his work of late had switched to teaching sign language to children with autism (Carr, Binkoff, Kologinsky, & Eddy, 1978; Carr & Dores, 1981; Carr & Kologinsky, 1983). For days I thought that I made an enormous mistake by coming to Stony Brook, and began weighing my options. The next time we spoke was at our first scheduled meeting, which was supposed to be a 30 minute appointment to go over my role as his research assistant. Two and a half hours later we had largely designed the study that would serve as my master's degree project and that would change the course of his research once again (Carr & Durand, 1985).

Our research over the next few years focused on demonstrating the procedures for and the value of teaching replacements to reduce problem behavior. The basic premise was that once you understood the function of a behavior, you could teach another behavior that served the same function and this new behavior could potentially replace the problem behavior. The first study was able to show that just teaching and reinforcing another behavior didn't reduce challenging behavior. Instead, the challenging behavior was reduced only when the student had another behavior that served the same function. In the first draft of our write-up, we called this approach "differential reinforcement of communication" (DRC) because it resembled other schedules of reinforcement (differential reinforcement of other behavior – DRO, and differential reinforcement of incompatible behavior – DRI). Little did we know that this would trigger a firestorm of outrage by reviewers of the *Journal of Applied Behavior Analysis*. Some suggested that our use of the phrase implied that we were of the belief that we discovered a new schedule of reinforcement – a form of behavioral heresy. In order to address these concerns, we played around with different wordings and ultimately arrived at "functional communication training" (FCT) and the revision was accepted (Carr & Durand, 1985). FCT is a major part of many positive support plans and is now one of the most commonly used interventions for challenging behavior (Matson, Dixon, & Matson, 2005). FCT is one of the few skill-focused behavioral interventions cited as having extensive support from initial efficacy studies (Smith, et al., 2007).

During my time as a graduate student, Ted and I collaborated on several more studies on FCT, demonstrating its value in promoting generalized behavior change (Durand & Carr, 1991) as well as the

mechanism for promoting maintenance (Durand & Carr, 1992). This latter study served as my dissertation research and my defense meeting served as a backdrop for a series of exchanges that would prove illustrative of the changes in Ted's personal and professional development over the next few decades.

During the summer of 1984 I was finishing my internship at a psychiatric hospital, writing up my dissertation, planning to move for a new job and expecting the birth of my son. Obviously this was causing some scheduling challenges because I wanted to defend before I left town. After numerous permutations I decided to schedule the defense meeting for July 18th, which also happened to be my son's due date. I assumed the odds of his being born were not 100% for that specific date, and decided to gamble. Fortunately, he wasn't born that day – he arrived the night before! As I walked into the seminar room I probably looked terrible, but proudly announced that as of last night I was a father. Ted looked at me, hesitated, and said a perfunctory "Congratulations." Then he started the meeting. Fast forward some five years later. The phone rings in my office and it's Ted. "I'm so sorry," he blurted out. "What?" "I'm so sorry" he repeated. "My son Aaron was born this week and I've been a wreck. I don't know how you were able to defend your dissertation on no sleep after your son was born. I'm so sorry." We laughed about this at the time, and I never let him forget it, but it also signaled a change in him that I believe influenced the transformation in the focus of his research interests. Being a husband and a father later in life gave him a different perspective on the people with whom we worked and their families.

Over the next decade or so a number of events in the field also conspired to shape Ted's work. The controversy over the use of "aversives" provides an interesting exemplar. Early in his career, Ted's view of interventions such as contingent electric shock was more empirical than philosophical (Carr & Lovaas, 1983). Later, he moved to object to punishment-based approaches on conceptual grounds, suggesting that they would not ultimately be effective because they did not directly address the functions of behavior (Carr, Robinson, & Palumbo, 1990). Perhaps it was his personal experiences as a husband and father, or his involvement in the Rehabilitation Research and Training Center on Community-Referenced Technologies for Nonaversive Behavior Management and its team of influential scientists (Horner, et al., 1990) or some combination, but his philosophical objections to interventions that could be painful or demeaning began to develop and he started to focus his attention on "positive behavior support" (Sailor & Carr, 1994). He was influential in the creation of the Association for Positive Behavior Support (serving as president from 2003 to 2006) as well as the *Journal of Positive Behavior Interventions*. He co-authored a monograph and several conceptual papers on positive behavior support that helped define the field (Carr, 1997; Carr, et al., 2002; Carr, et al., 1999) but also caused controversy among those who disagreed with some of his arguments (Johnston, Foxx, Jacobson, Green, & Mulick, 2006). Ultimately he believed that that improving someone's behavior without improving his or her life is an empty success.

Ted lived long enough to receive multiple awards, including the Applied Research Award for Outstanding Contributions to Applied Behavioral Research from the American Psychological Association (Division 25, Analysis of Behavior) in 2001 and the Distinguished Research Award for Career Achievement from the Arc of the United States in 1999. He was on the editorial boards of most of the

distinguished journals in our field and was invited to speak all over the world. His wit and analytical mind were invaluable to our field and they will be greatly missed. And I will miss our three hour dinners at conferences that I would look forward to for months.

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