

Remembering Gordon Bower (1932–2020)

September 30, 2020



Caption: Gordon Bower (left) and Alan Kraut (APS Executive Director Emeritus) in 2007, following the ceremony at which Bower received the National Medal of Science.

Gordon H. Bower, who served as APS President from 1991 to 1993, passed away on June 17, 2020. A world-renowned scientist and recipient of the United States' highest scientific recognitions, Bower was a longtime psychology professor at Stanford University, where he influenced generations of scientists throughout the field.

Bower's mark on psychological science is wide and deep, illuminating new connections between processes ranging from imagery to emotion and language with memory, learning, and reasoning throughout a career spanning over fifty years. Among his lifetime of scientific accomplishments—for which he received the APS William James Award in 1989 and the U.S. [National Medal of Science](#) in 2005, in addition to numerous other recognitions—Bower is known for discovering the links between emotion and memory.

A recipient of the 2018 APS Mentor Award, Bower is fondly remembered by his students and collaborators alike for his larger-than-life personality and for his rare ability to challenge researchers to

[“tear the weak \[ideas\] to shreds in the search for a gem,”](#) while simultaneously supporting them as individuals and working with them as equals.

APS is pleased to honor Gordon Bower with this collection of personal recollections by those who knew him best.

John Anderson

Carnegie Mellon University

I had no idea what I was in for when I showed up at Stanford to start graduate school in 1968. I was a particularly green, just turned 21, with lots of enthusiasm for studying human cognition but really little sense for how to do that. I knew I was going to work with the famous Gordon Bower and I thought I was going to study mathematical psychology. However, in our first meeting Gordon told me that mathematical psychology was dead (surely an exaggeration) and that I should study artificial intelligence. Being a compliant student, I followed his advice and together we began applying it to an understanding of human memory.

What I experienced is what so many of his graduate students have experienced—someone who was both encouraging of your ideas but also critical of any weaknesses in them. I spent time in his office almost every day, describing the newest results, receiving encouragement, feedback on how to best present these ideas, and advice on how to do it better. Every paper I wrote came back marked up with red ink. Considering where I started from, I emerged 4 years later with a remarkably productive graduate career. However, I was still pretty innocent in the ways of professional psychology, and Gordon assisted a lot in those first few years. Many times in subsequent years Gordon reached out to me with encouragement and advice. It is remarkable that Gordon was able to pursue his own successful scientific career and be so involved in the lives of so many of his students.

Robert A. Bjork

University of California, Los Angeles

Over 50 psychological scientists, many among the most prominent in their fields, can claim officially to be a Gordon Bower student, but what would that number be if every student or postdoctoral fellow he influenced profoundly, like me, were to be counted? That number might be a record in both number and scientific diversity, given the scope of his research contributions. He made early contributions to research on reinforcement and reward mechanisms in animals; then to mathematical modeling of human learning and memory; then to connectionist modeling, artificial intelligence, and story and schema understanding; and then to social/motivational dynamics and cognitive therapy. Gordon, however, was a pure accumulator of research interests: When venturing into a new research domain, he tended to see interesting linkages to his earlier research and never really lost interest in any topic he had explored.

Gordon Bower's mentoring may also set some kind of record for duration: As the years passed, as his students will testify, he went from being one's teacher and research supervisor to being one's friend, advocate, and booster. He kept track of and bragged about his former students' research and accomplishments; he took pains to be (very visibly) in the audience during their presentations at

conferences and meetings; and he advocated for them when opportunities arose. Those of us who worked with Gordon, but were not officially his students, profited as well. When, as a graduate student at Stanford, I serendipitously stumbled on directed-forgetting effects, it was Gordon who first thought those results were interesting and important—rather than, say, a consequence of my making some error in recording or tabulating the results. He even modified a research apparatus he was having built so that we could run a directed-forgetting experiment on the apparatus. Tragically, those results did not get published because they seemed uninterpretable at the time, though they later became understandable, after research I carried out at the University of Michigan. (That I did not then get back to Gordon so that I might have then had a publication with him still bothers me.) A few years later, when Gordon was visiting Michigan and I was telling him about my current research he told me that I “lacked throughput,” meaning that I was not wrapping up projects and getting them submitted to the extent I should. I took that advice very seriously and acted on it, though not up to Gordon’s impossible standards.

It is interesting that Gordon, though always a wonderful advisor, became—by all accounts—a gentler/kinder Gordon Bower over the years. I once told him that my tending to ask questions after talks at meetings was modeling after him. He then told me to be sure that my questions were not about me—that at some meeting he had realized, when back in his hotel room, that he had asked a student presenter some questions that were, in his words, self-aggrandizing and about him, not the student, and he vowed never to do that again. I thought my admiration of Gordon could not go higher, but that story made Gordon seem all the more human and admirable. Events in his life prevented him from seeing how good he could have become in baseball, but he is a Hall-of-Famer as both a researcher and person in my eyes.

Larry Erlbaum

Bower’s publisher at Lawrence Erlbaum Associates

Gordon was a great mentor, not only with students, but to any who attended him carefully. He was a model of honesty, care, compassion, and giving. Being born in the Great Depression, where money and other resources were meager, he had a keen sense for helping his fellow human beings, which took form in the care and attention he lavished on students, friends, and family. Though not often noted for his sense of humor, he could easily fall into funny rants (those with whom he shared fictitious Moose-head gifts can attest to that) and shrewd observations on the social scene. His loyalties were clearly defined (The Warriors, almost any Stanford teams) as were his tastes (hamburgers, not caviar). Most of all, Gordon was a caring man, whether it was a friend’s health or other contretemps, a student’s needs, a colleague’s worries. You could count on him to do whatever was in his power to lend a hand.

Although distinguished before he had hardly begun his climb to academic prominence, his modesty was apparent even then. Kenneth Spence co-opted him to edit *Advances in Learning and Motivation* before Gordon had hardly settled at Stanford. When asked by a publishing busy-body about his involvement, he retreated into a Gary Cooper reserve and allowed he was a “lucky fella” to be involved in the series.

If one was visiting Stanford, an invitation to lunch at Gordon’s was always forthcoming. If there was a convention, there was always an invitation to the Stanford party. A hero to many, Gordon stayed true to a modesty and reserve that only burnished his image. We have lost a great scholar, a great friend, and a great man.

Arnold L. Glass

Rutgers University

Gordon Bower was my mentor and thesis adviser for my PhD in psychology at Stanford. During my second year of graduate school I briefly went back East and came back engaged to be married. My fiancée, Lynne, joined me at the end of the summer and we immediately made plans to marry locally with none of our family or oldest friends in attendance. However, Gordon and Sharon would not let the occasion go uncelebrated so they gave us a wedding celebration at an elite restaurant for ourselves and some local friends. One of the most memorable events at the celebration for us was when the waiter asked Gordon to try the wine before it was distributed and he rejected it and had it send back. The next bottle was satisfactory. Gordon loved to play the role of the unworldly boy from Appalachia but he had a range of tastes and abilities that he did not advertise.

Later that year, Lynne and I had the opportunity to stay at the Bower house when Gordon and Sharon went away for a few days. The Bower household was a smoothly functioning enterprise and the three Bower children, Laurie, Tony, and Julia, took excellent care of us. Our only function besides joining their games was driving them to their neighborhood activities. This was something I did not do very well, denting the family car in the process.

We also invited Gordon and Sharon for dinner at our tiny efficiency in a neighborhood that no longer exists, Whiskey Gulch. It was so small that the only way for us to all eat together was to eat picnic style on the floor. We were all young enough to both think this was fun and spry enough to accomplish it.

When I took up my position at Rutgers on the other coast, we were not able to see the Bowers often. Then we heard that they would all be staying with us overnight on a cross-country trip. We had a large house that could accommodate the entire Bower clan. We made great plans for how we would entertain them. At the arrival everything went as planned. Unfortunately, the next morning we all awoke to no water! That night our water heater had sprung a leak so I rented a water vacuum to de-flood our basement. The entire Bower clan treated this as a wonderful, unexpected, adventure, taking turns using the water vacuum and cleaning up the remaining dampness with mops.

The water heater epitomizes our life-long experience with Gordon and his family. It was always fun.

Arthur Glenberg used this handout to help students improve their presentations. Download a PDF of the entire 5-page list [here](#).

[Download](#)

Arthur Glenberg

Arizona State University, Universidad de Salamanca, Humboldt-Universität zu Berlin

Gordon Bower inspired my career even before I had one: As an undergraduate, I heard him give a wonderful talk at the 1970 Midwestern Psychological Association meeting in Cincinnati. As a graduate student, I inherited research, speaking, and writing insights passed on by his student, Bob Bjork. And as a faculty member at the University of Wisconsin-Madison and Arizona State University, I used his handout, "Do's and Don'ts for Brief Research Talks," as a primary source for helping students give good presentations (see attached). I had gotten a copy from UW's Lyn Abramson who, if I remember correctly, had gotten it from Lauren Alloy.

That handout got Gordon into a bit of trouble. Decades after 1970, I gave a talk at UCLA as part of a celebration of Bob Bjork's career. Gordon, accompanied by his wife Sharon, came up to me to congratulate me on the talk. I said, "Of course it was a good talk, I simply followed your list of Do's and Don'ts for Brief Research Talks." Sharon turned to him and said something like, "Gordon, how could you? That was MY list of Do's and Don'ts!"

Mark Gluck

Rutgers University

Gordon never fulfilled his early dream of pitching a no-hitter at Yankee stadium; he spent his entire professional career at Stanford University and retired to emeritus status in 2005. However, in his chosen career of psychology, where he went up to bat time after time against a broad and diverse lineup of the most challenging problems in learning and memory, Gordon hit a string of home runs worthy of his childhood idol, Lou Gehrig.

[See Gluck's full tribute here.](#)

Douglas Hintzman

University of Oregon

When I joined the Stanford graduate program in 1963, I had never heard of Gordon Bower. At first, I set up an experiment on electrical brain stimulation, using rats, in another lab. But a lab assistant plugged my DC circuitry into a wall outlet, bringing my study to a fizzling end. Because I had worked in a memory lab as an undergrad, I went to see whether Bower would take me on. His response was brusque: "I'm a busy man, and don't have time to waste on some fool student who doesn't know what he's interested in." I thought he was going to kick me out of his office.

For the record, Gordon was indeed a busy man. Nearly every morning, we students would see him hand a full writing tablet to his typist. Rumor had it that these first drafts could be sent off for publication with few revisions. In those days, in addition to papers on conditioning in pigeons and mathematical models of concept learning, he produced multiple chapters bringing Hilgard's classic *Theories of Learning* up to date. And then, to our surprise, Gordon turned his research almost entirely to visual imagery and other techniques for improving recall.

To return to my story, Gordon did not kick me out of his office, but got me working on a memory-span experiment. While running it, I discovered something unexpected: The to-be-remembered items were

visual, and responses were written, but confusion errors reflected how the items were pronounced. With Gordon's agreement, I dropped the experiment and designed a new one to investigate this interesting phenomenon. Alas, a few weeks later Gordon alerted me to a recent article by R. Conrad, in the *British Journal of Psychology*, showing that I had been scooped!

Late in my first year, Gordon handed me a technical report by Feigenbaum and Simon, describing a computer-simulation model of serial learning. Excited by the idea that human information processing could be emulated on a computer, I learned how to program Stanford's B5000, and began working on a program that could learn paired associates. Unlike the Feigenbaum and Simon model, mine incorporated stochastic processes, so if you ran it on the same list repeatedly, the output varied, resembling data from human subjects. Once I had demonstrated that the model produced reasonable-looking similarity, transfer, and forgetting effects, I showed it to Gordon. He was enormously encouraging. His verbatim comment was, "Consider yourself reinforced!" With writing help from Gordon, the model was eventually published in the *Journal of Mathematical Psychology*, and with additional work, it became my dissertation.

A few months after I left Stanford, I got a letter from Gordon suggesting that I submit my dissertation to the Creative Talent Competition run by the American Institutes for Research. I did, and to my great surprise, it won. As an advisor, I think, Gordon was like a parent teaching a child to ride a bike. He knew just when to provide a steadying hand, and when to let go.

Roberta Klatzky

Carnegie Mellon University

I was one of a cohort who entered Stanford's "math psych" program in the period where cognitive psychology was nascent. Guided by the luminaries of mathematical learning theory, we struggled with now-classic issues: Had people learned anything about a concept if they kept making errors in classification? How many slots are in that short-term memory buffer? We students carried a copy of the "ABC book" by Atkinson, Bower, and Crothers as we trudged to the infamous Friday seminar where Gordon held sway. Gordon was intellectually demanding, more than a bit intimidating (at least to me), and kindness itself underneath. He and Sharon hosted the students for evening get-togethers—what a welcoming pair they were! In more recent times I had opportunities to see Gordon at APS meetings and was honored by being asked to introduce him for an award. I think he would be touched by our reminiscences and would then wave them away with his version (earthy, no doubt!) of an "aw, shucks."

Stephen M. Kosslyn

Harvard University

Gordon Bower had an immeasurable positive effect on my life, both professionally and personally. During my first quarter as a graduate student, Gordon was on leave but I had obtained a preprint of a chapter he wrote on his work on mental imagery. One line began "If visual mental images are like pictures, and can be scanned and the like" I read this and realized that if visual mental images are like pictures that could be scanned, then the farther people scanned across the visualized object, the longer it should take them. This turned out to be correct, and was the basis of my first-year research project, first

solo publication, and then much of my career. The irony is that Gordon edited out that sentence in his final draft!

I took an unusual path as a graduate student because my original advisor resigned from the faculty and left me without an advisor. I consulted with many faculty and basically did my own work for the first year. When I presented that work to the weekly “Friday Seminar,” Gordon—as was his habit—was very direct, honest, and highly critical. He took seriously my answers to his questions. A week later Gordon happened to run into me at a vending machine, and we started talking. We ended up sitting down and talking about science for over an hour. After that, he started showing up at my office (one floor above his) to bring me reprints and preprints that he thought I would find interesting. He made time to talk to me, even before I was officially his student. Gordon was a fantastic advisor: He was a master at hitting just the right balance between guidance and giving us freedom to explore and make mistakes.

Many years later, after I moved back to the Bay Area, I began to visit Gordon periodically during his retirement. Our relationship evolved from my just being his student to being a colleague and friend. We talked about many things, but he was particularly interested in how I was applying basic cognitive psychology and cognitive science to higher education. He loved to point out the historical precedents to what I was doing, and loved the fact that earlier work was still relevant. Nevertheless, he remained critical while still being supportive, and remained sharp as a tack and wise beyond words.

I’ve never met anyone else remotely like Gordon, and marvel at what a huge impact he had—not just on the field, but also on my and so many other people’s lives.

Alan G. Kraut

APS Executive Director Emeritus

Gordon Bower was always a good time!

Many will talk about Gordon’s enormous contributions to our science, and he’ll deserve every accolade. But I’ll also remember Gordon for his hearty laugh and the delight he took in jumping headlong into the action in professional and social events.

Gordon took leave from Stanford when he was APS President to come to Washington as visiting scholar at the National Institute of Mental Health (NIMH). He and Sharon rented a Connecticut Avenue apartment in the heart of D.C. I told you Gordon had to be in the middle of the action! And once I got over my shock that the President who was supposed to be three time zones away was now just down the road (meaning no more time difference excuses, as in, “Sorry, Gordon. I was out of the office the last five times you called.”), Gordon quickly became an extension of the APS staff. I remember he invited the entire staff over to the apartment for happy hour. Some were hesitant to mix business with pleasure, unsure what to make of an invite from this towering (literally and figuratively) figure in psychological science. Any worry evaporated as Gordon and Sharon welcomed us all. He regaled us with stories about other giants in the field—like “Bill” (Estes) and “Dick” (Atkinson) —with that full-throated laugh punctuating every punch line. He was one of us.

My wife, Jane Steinberg, and I enjoyed many wonderful dinners with the Bowers. Most memorable was

a family-and-friends Maryland crab fest at our home, hastily moved indoors due to rain. Gordon hauled and dried off furniture, all the while telling stories of his baseball days to Jane's dad. Then Gordon hammered away at crabs like an old pro. When he saw Jane at NIMH where she also worked, he'd always chuckle and ask if the living room still smelled like crabs. (Quick note: never hold a crab fest indoors.)

Gordon and I often visited the director of some federal agency or double teamed some congressional office. A meeting might start awkwardly, but, invariably, there was Gordon's outsized personality quickly putting it on a winning track. And Gordon was a bargain. When he put in for a meal reimbursement, it was often just for a Whopper—in fact, I believe he holds the record for the smallest meal reimbursement request ever at APS!

Yes, it was always a good time being around Gordon.



Bower (left) with APS Fellow Anders Ericsson, a cognitive psychologist at Florida State University. Both men died on June 17.

Elizabeth Loftus

University of California, Irvine

I first laid eyes on Gordon Bower a half century ago. He was that terrifying professor at Stanford who tore into graduate students during the Friday seminars with aggressive questions. We grad students bonded over that common ordeal. Many took courses from him, as did I. During that time, he was not at the forefront of my mind, as I was not his actual PhD student and we never worked together on research. I had no idea then how important a role he would later play in my life. He would crop up at unexpected time and places, good times and some bad ones. So even though I was not one of those fortunate students who had Gordon on the official doctoral committee, I got to take many short trips on Bower Road (as he named it in a memoir).

As I developed my own interests in human memory, I naturally read many of Gordon's papers. I especially appreciated his broad interests in how to process material for better learning, and his contributions to mnemonics. His work was featured in my own courses on learning and memory, providing for students a superb example of the applications of memory science to real-world problems. Lots of others could be writing these same words. Gordon and I also came together frequently in our support for various professional societies, like APS, and the Western Psych Association, and the National Academy of Sciences. Lots of others could be writing these same words.

But what lots of others may not be writing about is how Gordon popped on the scene to provide support and comfort during hard times. For example, when I began working on rich false memories, and consulting on behalf of accused defendants in cases that rested on dubious claims of massive repression of memory, I became a target of hostility leveled by repressed-memory patients and some of the therapists who helped them recover these dubious memories. Those objectors sent angry emails to my colleagues, and tried to get professional organizations to rescind their invitations to have me speak. They filed complaints, and even a lawsuit. In the midst of this turmoil, Gordon send me a cherished email. It read in part "The idea that someone would try to sue the Southeastern Psychological Association to keep you off the program strikes me as extremely bizarre. It can't succeed. I'm really sorry all this is happening to you; it seems the result of your sticking your head up above the crowd of cowering cowards."

Four years later, Gordon emailed again about another matter, and he let me know how strongly loving his and (wife) Sharon's feelings were for me. He concluded with "I am glad for what you are."

I've tried to follow Gordon's example, and send support to my fellow academic colleagues when they are facing difficulties of the sort I faced. Just last month I had a chance to do it again when one of our most wonderful cognitive psychology colleagues was "attacked" for some ambiguous things he said in a tweet, a sentence taken out of context, or an alleged dog whistle.

I'm grateful that I got a chance to speak at Gordon's Festschrift held in 2005 at Stanford so I could talk about some his valued communications that I had saved. I got to tell him back, "I'm glad for what you are." And now, I am sad, but I will always be glad—for what you were.

Lynne Reder

Carnegie Mellon University

Gordon Bower was a giant, literally and figuratively, in the field of psychology, a prominent member of Stanford's Psychology department and a legend in the field of human memory. Although I never worked with Gordon, I knew him since I was a Stanford undergraduate who took his graduate course on human memory and had an office down the hall from his. Gordon made a very strong impression on me and on everyone else. Everyone stood in awe of him.

Gordon was the John Wayne of cognitive psychology. He walked the walk and talked the talk, sometimes affecting a bit of a hillbilly twang. I'm not sure he ever said "hi there, Little Lady," but I'd bet money that he did. He just enjoyed giving people the impression that he was a hick and then zinging them with a penetrating question that would go to the heart of the theory or experiment being presented. Gordon had a booming, clear voice, and no one ever had to ask him to repeat his question. His questions were loud, clear, and to the point. It was an honor to be asked a question by Gordon. If he did not ask one, you knew he did not think much of your talk.

Gordon's scientific and intellectual curiosity was famous. He never lost interest in the fields he had conquered, but he was always excited to learn about new ones. Unless he thought the new idea was garbage (he would probably have a more colorful description), he would jump right in to follow up on these cool new ideas, perfecting studies that were often better than the first ones. He was delighted to hear what others were doing and offered great suggestions and predictions based on their presentations to him.

It was Gordon's graduate course on human memory that I took when I was an undergraduate that turned me on to the field. I was lucky to be introduced to the field by Gordon.

John Anderson dedicated all nine editions of his *Cognitive Psychology* textbook to Gordon, and I can see why. Bower had an enormous impact on how I understand human memory as well.

One of my favorite Gordon stories is when I first attended the Friday afternoon seminar in Jordan Hall, which the cognitive faculty and graduate students attended. I sat down in an empty chair at the foot of a large table. I was immediately told that that chair was reserved for Gordon Bower, and I quickly found another seat. Arnold Glass was about to describe his first-year project to the group. Arnie told this large audience that he could either present his first-year project or tell us about his comic book collection, and he asked for a vote. Virtually every hand was raised in favor of hearing about Arnie's comic book collection; everyone save one person: Gordon. After Gordon raised his hand in favor of hearing his first-year project, Arnie said, "Well, after taking a weighted count, I will talk about my research."

Gordon was full of jokes that made everyone laugh, whether it was in the hallway, the elevator, or in a cab to a restaurant during Psychonomics. He also commanded everyone's respect with his keen intellect, penetrating questions, and desire to learn and explore all there was to know. The field has lost a giant, not just from his imposing size and booming voice, but from his intellect, wit, and passion for psychology. He is missed.

Steven Sloman

Brown University

I arrived at Stanford with some trepidation, wondering if I'd fit in and if I'd keep up. I knocked on the office door of my new advisor. Gordon opened it, looked at me, and said, "So you're Sloman. What do you know about connectionism?" Gordon always got to the point, right away. No dilly-dallying and no flim-flam; just the facts, please. In 1985 he published a paper entitled "Failure to replicate mood-dependent retrieval." In anyone else's hands, such a paper would be castigating some competing researcher for shoddy research. Not Gordon. Gordon was deriding himself; he was famous for, among other things, demonstrating mood-dependent retrieval. Gordon wanted things to be right. He expected the people around him to get things right. That ethic is what allowed him to play a central role in building a program in cognitive psychology at Stanford that included the likes of Herb Clark, David Rumelhart, Roger Shepard, Amos and Barbara Tversky, a program like no other. And he set only the highest standards for himself. That's why he is known variously as the father of cognitive psychology, of mathematical psychology, and of cognitive science, depending on the audience. And he worked hard at being a mentor. That's why his list of PhD students is long and, in some cases, highly distinguished. He gave everyone around him all the independence they could handle and enough respect to criticize their ideas. He fostered an esprit de corps in his department that I have yet to witness anywhere else 30 years later.

Ewart Thomas

Stanford University

My first encounter with the extensive academic imprint of Gordon Bower occurred when I arrived as a postdoc in the lab of Robert Audley at University College London in 1967. Gordon had spent the 1965-66 year as Audley's guest and, for years afterwards, the Psychology department at UCL was abuzz with admiring stories of Gordon's intellectual and social contributions to almost every area of the department. I heard stories about how he would preside over lunches at which colleagues interested in, e.g., child development, learning, perception, decision-making, skilled behavior, delinquency and psychopharmacology would be forced to abandon years of mutual avoidance and respond, in each other's presence, to his trenchant enquiries about their research! One result of these interdisciplinary lunches was a comprehensive statistical analysis, "Non-parametric trend tests for learning data", that UCL's A.R. Jonckheere published with Gordon in 1967. I spent many hours in that first year poring over the techniques and proofs in this paper, as well as the associated models of learning that were developed in the previous decade. I am grateful to Gordon for these early examples of intellectual breadth and depth, and of academic leadership.

As I remember it, we met for the first time when I gave my job talk at Stanford in 1971. Our shared interests in mathematical models and mutual UCL friends doubtless facilitated my introduction to Stanford. It was exhilarating to have a ringside seat at, e.g., the Friday Seminar (lovingly known even today as 'Frisem') as Gordon and his students contested the details of memory modeling with R.C. Atkinson and his students. At a more intimate level, Gordon and I occasionally would have the opportunity to mentor each other's graduate students—future professors such as N.E. Cantor, A.P. Cole, T.W. Malone and B.H. Ross. Sometimes these opportunities led to a student publication or other felicitous outcome, whilst on other occasions the proximal outcome was my having to apply a dollop of salve to a bruised but resilient ego! The field in which we toiled, roughly labeled as experimental/cognitive/mathematical psychology, was not a diverse one in those days.

In my second decade at Stanford, university administration provided an additional layer to our relationship. I was appointed department Chair in 1983, a year after Gordon had demitted that office, and the same year that he was appointed Associate Dean of the School of Humanities and Sciences. During our concurrent terms as Chair and Associate Dean, Gordon was a generous source of wisdom on the preparation and evaluation of academic portfolios, and on how our department could improve its reputation while taking advantage of Stanford's affirmative action initiatives. These lessons proved invaluable when I was appointed Dean a few years later. Even his discomfort at having to make decisions under uncertainty (which, he admitted, gnawed at him in his decanal role) became for me a challenge to be tamed, possibly through the application of satisficing, minimax or any of the other heuristics one picks up from decision theory textbooks.

Our relationship remained in a sort of steady-state for the next two decades, up until a coincidence of events about three years ago shifted it to a new level. One event was my retirement from active duty, and the other was Gordon's diagnosis of pulmonary fibrosis. The latter put a premium on the gentler exercises, such as walking, and the former allowed me the flexibility to accompany him on some of these walks. We took turns in talking, and it is perhaps surprising that we spent very little time discussing the half century of Gordon's groundbreaking theoretical and empirical studies in so many areas of cognitive psychology. We talked instead about how, during his summers in high school, he was the popular pitcher on a semi-pro baseball team that included World War II veterans and, because they could not pay him, they used to give him a huge lunch consisting of hamburgers and ice-cream soda! Turning to current events, he explained that his lung function was quantifiable by how much air he could blow into a spirometer, thereby generating a time-series which, because of the progressive nature of the disease, had to be decreasing. We then tossed out ideas on how, if we could define an "end-point" on the y-axis, we could predict "time remaining", and we agreed that we would have to decide first if the decreasing trend followed an exponential or a power law!

This entertaining blend of Frisem banter and Caribbean *mamaguy* came to a sobering stop when Gordon reported that the time-series had to be truncated prematurely because his blowing into the spirometer brought on a coughing fit. He and I had had a brief chat three or four decades earlier about the increasing irrelevance of simple mathematical models because of the inability of these models to account for, e.g., a person's cognitive interpretation of the stimulus. This time, however, the rejection of our "model" felt more radical. It wasn't just that we had ignored the state-dependent relevance of spirometry, but we were now forced to acknowledge a parallel data set in which the speed and distance of our walks were decreasing, and talking and walking were becoming less compatible. But neither of us had the expertise or the appetite for engaging with this broader arc.

Happily, there was no shortage of alternative topics, and I eagerly suggested that we move our conversations to one of the bohemian cafés in Palo Alto. Gordon agreed to a move but insisted on a more quotidian venue where he knew he would get his favorite beverage exactly how he liked it. As a result, we ended up at the McDonald's nearby, on the edge of Silicon Valley, where he relished his *frappuccino* while I settled for something non-descript. I got the feeling that his enjoyment was linked to those free lunches he had scarfed down during his high school summers, and this was why, when home visits eventually replaced these trips, I always tried to sneak in with his favorite drink. Not all of his handlers approved of this dietary supplement, but I knew I could count on the unfailing hospitality and graciousness of Sharon Bower, Gordon's wife of more than six decades!

One of the many gifts from Gordon during these last three years was his putting me in touch with Bob Audley, my postdoc adviser, whom I had not seen for about three decades. Gordon and Sharon had visited with Bob and his wife, Vera Bickerdike, in recent years, and so he was able to provide Bob's coordinates. I visited Bob and Vera in September last year and made sure to thank Bob for the many ways in which he helped me five decades ago. But the true value of Gordon's gift became evident only five days ago, when it was reported that Bob had just passed away. The sense of loss would commingle with the satisfaction derived from last year's visit in London. In turn, this supported a wider contentment that, in this last round of conversations, I was able to acknowledge, not only my personal debt to Gordon, but also that of his friends and colleagues near and far. We will miss his inventive mind, his modeling of excellence and his intellectual leadership.

Barbara Tversky

Stanford University

It seems that no matter what we aspire to do, we need giants to inspire us. Gordon was in the pantheon when I became enamored with memory as an undergrad. Imagine my astonishment when he discovered my PhD thesis before it was published, adding it to an influential chapter on imagery and memory he was writing. Later I had the good fortune to be a vicarious and eager student; still later, a close colleague at Stanford for more than 30 years and always a friend. He was exemplary beyond reach in each of those roles. He made each of us feel special as researchers, as colleagues, and as friends. That impeccably organized mind that kept track of a vast quantity of research also kept track of a vast social network buttressed by a firm set of values. He gracefully and effortlessly combined humanity and integrity. Gordon truly cared about each of us, as people, as professionals. I keep him close.