

# Cognitive Critique



## REFLECTIONS

JENKINS AND PICK, EARLY CENTER LEADERS<sup>1</sup>

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Important institutions and events merit occasional reflection—reflection on their accomplishments, on the antecedents to current events and situations, and on the people who brought them about. Cognitive Critique is an appropriate place for reflecting on recent events related to the Center for Cognitive Sciences. It was founded as the Center for Research in Human Learning (January 1964),

and with shifting research trends became the Center for Research in Learning, Perception and Cognition (1987), and then the Center for Cognitive Sciences (1996). As of academic year 2013-14, The Center for Cognitive Sciences has reached an incredible milestone: 50 years of continuous funding by grants from the National Science Foundation, the National Institute of Child Health and Human Development, and the colleges at the University of Minnesota. This remarkable record reflects special leadership, effective training, and highly successful research and scholarship by the faculty and student members of the Center. It certainly is cause for reflection and celebration.

Sadly, however, the past year also records the loss of the Center's first two Directors, James J. Jenkins and Herbert L. Pick. These two intellectual leaders of the Center modeled wide-ranging scholarship, commitment to true fellowship, the importance of working across disciplinary boundaries to advance our understanding, and abiding faith in the value of training the next generation. Their personal strengths shaped the Center for all time, led to many successes, and guided later directors. Herein, we shall reflect on these two seminal figures in the Center's history.

### **JAMES J. JENKINS (1923-2012)**

James Jerome Jenkins helped lead psychology's "cognitive revolution" in the second half of the twentieth century and into the present. Jenkins was just at the beginning of this revolution when he assumed the Directorship of the Center for Research in Human Learning. His work advanced multiple research areas: learning and memory, sentence processing, aphasia, speech perception, and perceptual organization. More than half of his contributions occurred while he was at the Center in Minnesota, with additional contributions as he moved on in his career to the University of South Florida. Jenkins's remarkable combination of abilities as scholar, teacher, and team leader led to nearly 200 scholarly publications and 500 conference and meeting presentations, multiple leadership positions, teaching awards, professional accolades, and intense devotion from generations of students.

Jim Jenkins, fondly known as "J-cubed," was born on July 29, 1923, in St. Louis, Missouri. He attended William Jewell College, but enlisted in the Army in 1942. He received a bachelor's degree in

physics from the University of Chicago in 1944 as part of his training as a war-time meteorologist. After serving in the South Pacific, he returned to William Jewell College, obtaining a bachelor's degree in psychology in 1947. He received a master's (1948), and a doctorate (1950) from the University of Minnesota under Donald G. Paterson, a giant in industrial psychology. His later interests in language and ideas were foreshadowed in his early graduate school publications, which covered such topics as communication between management and workers, readability formulas, and a study of ideas vs. media – work that appeared in journals as diverse as *Journal of Applied Psychology*, *Journalism Quarterly*, and *Journal of Comparative and Physiological Psychology*. Upon graduation, he turned down an offer from General Motors to join the faculty of the University of Minnesota Psychology Department (at 1/3 the salary!).

In 1953, Jenkins attended a Social Science Research Council summer meeting that was instrumental in launching psycholinguistics as a discipline. He originally believed that working in the associationistic tradition, but also invoking unobservable internal analogs to stimuli and responses, could provide the psychological underpinnings for language—an approach called *mediation theory*. He was deeply into this effort when the Center was founded. With colleagues and students at the Center for Research in Human Learning, Jenkins launched a “heroic set of studies demonstrating the existence of mediators and the scope of their effects in language” (Baars, 1986, p. 192). The work was not always warmly received, but Jenkins and his students persevered

By the time the work had become accepted, Jenkins had already found empirical reasons to reject mediation's utility in accounting for language performance. He spent 1958-59 and 1964-65 as a Fellow at the Center for Advanced Study in the Behavioral Sciences. During the latter year, the influence of Noam Chomsky's linguistic revolution took deep root. Jenkins became convinced that a different conception of “how the head works” (one of his favorite phrases) had to be found. This attitude of maintaining a flexible theoretical orientation is exemplified in the title of a citation classic he published in the *American Psychologist* (1974), “Remember that Old Theory of Memory? Well, Forget It.” One colleague reflected: “He was a central figure in paradigmatic innovations in cognitive psychology; we also knew that, as he moved ahead, he had no hesitation in questioning these earlier views.” Giving up what you have

been doing successfully and trying something completely different requires a special intellectual courage. Throughout his career, Jim always sought alternative perspectives on intransigent traditional problems—an attitude he infused into Center students. It is perhaps this that accounts for the remarkable number of scholarly leaders who emerged from the Center over the years.

Jim's openness and problem-oriented approach to science allowed him theoretical flexibility. He and his students examined rule-governed, generative behavior, publishing additional classic work. Later, perhaps in part due to his association in the Center with Pick, J. J. Gibson influenced Jenkin's approach to speech perception. Jenkins sought the structural invariants in the acoustic stimuli that allow one to perceive a particular vowel despite enormous variation in the physical signal. He and his colleagues determined that the key invariants were dynamic and relational ones. He called this general approach *contextual functionalism*. Jenkins's main collaborator in the speech perception work was the outstanding investigator Winifred Strange, who became his second wife. Together they left the Center in 1982 and continued their dynamic collaboration at the University of South Florida.

Jenkins took on many leadership roles that he executed with integrity and great good cheer. He served as the American Psychological Association (APA) Representative to the National Research Council, Chair of the Psychonomic Society Board of Governors, President of APA's Division of Experimental Psychology, Chairman of the APA Board of Scientific Affairs, and President of the Midwestern Psychological Association. He was a member of the Board of Directors of the International Society for Ecological Psychology, and also served on numerous national grant review panels and editorial boards.

Many honors came his way, including an Outstanding Alumni Achievement Award from the University of Minnesota and being named Distinguished Research Professor at the University of South Florida. Jim had an enormous impact on those around him at the Center. He reveled in serving as an intellectual accelerant for others and felt personally rewarded by their successes. This is what made him so successful as the Director of the Center for Research in Human Learning and later Director of Training (1965-1973, 1973-1982). Students flocked to him. In his 32 years on the Minnesota faculty he supervised 46 Ph.D. students. He moved to the University of South Florida in 1982—serving as Psychology Chair for four

years—where he mentored an additional 36 doctoral students before retiring in 2000. After his retirement, he spent eight years as Adjunct Research Professor at the City University of New York. One former student wrote, “Jim Jenkins had a seemingly magical way of helping all his students turn very garbled and unclear notions into thoughts that made sense for both research and theory.” He imposed no party line on his students, as can be seen from the great variety of academic and applied careers they created.

Jim’s colleagues valued him highly: “I had never before met a psychologist who seemed to be ‘bursting’ with sheer humanity”; “[He] got excited about a lot of things, and that released something in me...”; and, “He could always be counted upon for what seemed to be unlimited intellectual depth...and sincere interest.” Jim was widely loved—and will be greatly missed. He died November 17, 2012, in Tampa, Florida. The Center for Cognitive Sciences owes a lasting debt to James J. Jenkins.

### **HERBERT L. PICK, JR.** **(1930-2012)**

One way to describe Herb Pick is that he was a man for all seasons. He exemplified the best of what it means to be a scholar, mentor, teacher, researcher, critic, and friend. Herb was born in Newark, New Jersey on July 18, 1930. He attended Cornell University on an ROTC Scholarship, majoring in Sociology. He also was on the varsity football team. He completed his ROTC obligations by serving on the cruiser USS Worcester as an engineering officer. He returned to Cornell to earn his Ph. D. in Psychology in 1960. The work and theoretical approach of James and Eleanor Gibson served as a major influence throughout his subsequent research. Herb’s first teaching position was at the University of Wisconsin from 1960-1962. The fall of 1962 marked the beginning of his 49-year tenure at the University of Minnesota’s Institute of Child Development, progressing from Assistant to Professor. He was Adjunct Professor in the departments of Psychology, Kinesiology, and Russian and Near Eastern Studies. Herb spent a year as a graduate exchange student at Moscow University in 1959 -1960. This was followed by a number of visits as a Fulbright-Hays Exchange Scholar (1978), and as a visiting professor (1964-1965, 1970, and 1986). He also was a visiting lecturer and professor in China, the Netherlands, and Uganda.

Herb Pick's research focused on perceptual learning. His research included studies in naturalistic and laboratory settings. A chapter co-authored by Herb and his wife, Anne Pick, a Center scholar in her own right, established perceptual learning and development as a core discipline within developmental studies. A one-day conference (*Realism to Relevance: An Ecological Approach to Perception, Action and Cognition, A Festschrift to Honor the Scientific and Mentoring Contributions of Herbert L. Pick, Jr.*), was held in Minneapolis June 6, 2013, just a few weeks before his death. Eighteen colleagues, many of them former students, presented papers. The scope of Herb's research interests is illustrated by the titles of the four paper sessions : (a) Speaking, seeing, and acting; (b) Hand and mind: Information for thinking; (c) Perception-action coupling: Learning, scaling, and calibration; and (d) From laboratory to teaching, and learning in the real world.

Herb was very active in interdisciplinary research. He had a long and productive collaboration with Gerald M. Siegel, Professor of Speech, Language, and Hearing Sciences at the University of Minnesota, studying feedback mechanisms in speech and sign language. He also worked across disciplines with colleagues in kinesiology and other departments, and he continued to participate in research with former students, even as they left Minnesota and established research programs in other universities.

Herb was a member of the Center from its inception in 1964. He served as director from 1973-1978, years marked by the expansion of research initiatives, seminars, colloquia, and training opportunities for graduate and postgraduate students. His commitment to the development of the next generation of scholars, researchers, and teachers is evident in his long participation as a mentor and then program director of the NSF- and University-funded Research Experiences for Undergraduates. The purpose of this 10-week summer program is to provide undergraduates who are interested in the behavioral and cognitive sciences with an intensive research experience that will serve as a preview of some activities of a first-year graduate student.

Herb's favorite means of commuting was the bicycle. Only ice prevented him from using this mode of transportation throughout the year. He loved outdoor activity from sailing to winter camping in the Boundary Waters. He was joined in these outings by current and former students and colleagues. These excursions were a wonderful combination of adventure and shop talk.

Herb and Anne were frequent hosts for visiting colleagues. Former and current students who needed a place to stay invariably found one with the Picks. One of the highlights of the Institute of Child Development's welcome weekend for incoming graduate students was the dinner hosted by Anne and Herb at their home.

## PAST IS PROLOGUE

One of Maurice Sendak's classic children's books is about a Pierre who does not care. The story ends with Pierre exclaiming, "Yes, indeed I care!" Jim Jenkins and Herb Pick really cared, and they exemplified this caring by their actions. They cared about science, research, mentoring, teaching, and poetry; and, as well, they cared about their students, colleagues, friends, and family. They taught us all to care.

These two leaders established the ethos of the Center as a premier research and research-training institution in learning and cognition. Their commitment to interdisciplinary and collaborative research set the pattern for those who followed as Center directors: Gerald Siegel, Bruce Overmier, Albert Yonas, Paul van den Broek, Gordon Legge, and the current director, Apostolos Georgopoulos. Their legacy is generations of questioning students who are advancing cognitive science.

Under the directorship of Professor Georgopoulos, the Center became an all University Center in 2012 with increasingly broad linkages across the University and the Brain Science Center at the VA Medical Center. It has added a Ph.D. program in Cognitive Sciences to its training mission.

## ENDNOTES

1. Parts of this document rely upon and/or liberally borrowed from the two published obituaries cited in the reference section of these reflections.
2. Foss was one of the initial pre-doctoral trainees of the Center in 1964. Gershenson served as Co-Head or Head of the Center's Summer Research Training Program for Undergraduates. Overmier was Executive Officer and fourth Director of the Center. Siegel was third Director of the Center.

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