Arthur L. Benton, Ph.D.: Pioneer, Colleague, Mentor, and Friend

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Arthur Benton, 97, died in Glenview, IL on December 27, 2006. He was born October 16, 1909 in New York City. He received his B.A. and M.A. degrees from Oberlin College, where Raymond Stetson was his mentor, and his Ph.D. in Psychology from Columbia University in 1935 under the mentorship of Carney Landis of the New York State Psychiatric Institute . Benton completed his training as a psychologist at the Payne Whitney Psychiatric Clinic of New York Hospital. Early in 1941, he volunteered for service in the United States Navy and was commissioned as a lieutenant in the medical department. His active duty lasted until 1945, followed by many years of service in the United States Navy Reserve, retiring at the rank of Captain. During his assignment at the San Diego Naval Hospital, Benton worked closely with neurologist Morris Bender and examined servicemen who had sustained penetrating brain wounds during combat. The experience of assessing servicemen with brain injury and Bender's influence led Benton to develop the Visual Retention Test, which still bears his name and continues to be widely used in clinical neuropsychological assessment.

In 1946, Benton moved to the University of Louisville where he was appointed associate professor of Psychology. In 1948, he joined the faculty of the University of Iowa as professor and director of graduate training in clinical psychology. In 1958, he became professor of psychology and neurology, retiring in 1978, at which time the Benton Laboratory of Neuropsychology in the Division of Behavioral Neurology was dedicated. During his tenure at Iowa, Benton supervised 46 doctoral dissertations and 24 master's theses.

He was revered by his students and postdoctoral fellows, as well as by many neurologists for his mentoring of their research and the guidance that he continued to provide during their careers, even after leaving Iowa City.

Arthur Benton introduced novel and objective neuropsychological assessment techniques that expanded our understanding of the deficits manifested by neurologically compromised patients, both children and adults. His approach was to develop standard tasks to evaluate the presence of motor, sensory, visuospatial, language, and cognitive deficits that had been described in the neurology literature in association with specific lesion sites or as part of syndromes. Based on the distribution of data obtained from neurologically intact subjects with similar demographic features as the neurology patients, Benton defined the presence of specific neurocognitive deficits by scores, which fell below a criterion percentile of a comparison group such as medical patients without neurological disease or healthy subjects. This methodology enhanced the reliability of assessment procedures and emphasized operational definition rather than arbitrary or subjective determination of neuropsychological deficit. Using sensitive examination procedures in healthy human subjects, Dr. Benton also contributed important findings concerning hemispheric specialization. Benton's studies using these innovative clinical assessment techniques, the normative data he collected, and the examiner manuals he authored facilitated the emergence of neuropsychology as a separate field of research and stimulated the development of clinical neuropsychological practice in the United States and other countries.

An article based on his dissertation was published in 1935 in the Archives of Psychology. Benton's scholarly contributions also reflected an interest in the history of neuroscience, including early reports of neurological syndromes by neurologists and other clinicians in Europe that had been published in languages other than English and were subsequently overlooked by researchers and clinicians. His last two articles appeared in 2003 in the Journal of the History of Psychology. Having learned French, German, and Italian; Benton disseminated novel but obscure observations that provided impetus for him to develop confirmatory studies using modern neuropsychological techniques. To illus-

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trate Dr. Benton's scholarly probing of the non-English medical literature, Ennio De Renzi (personal communication) noted that Benton was the first to translate and disseminate the earliest report of a prosopagnosic patient, which was published in 1867 by the Italian ophthalmologist, A. Quaglino. This aspect of Benton's scholarly activities was enhanced by the invitations he received to lecture at academic centers in Europe and to pursue trans-Atlantic collaborations. His overseas friends and colleagues have remarked about Arthur's hospitality and thoughtfulness during their visits to Iowa City. Benton's research and scientific communications were instrumental in neuropsychology becoming an international discipline. His work also exemplifies the cross-fertilization of neurology with cognitive psychology and neuropsychology, a direction that continues today.

At a recent memorial at the International Neuropsycological Society meeting in February, Benton's students and colleagues reflected on his ability to encourage their development as well as on his kindness and caring for others. He was a true gentleman with a wonderful sense of humor who knew that "guests in Holland usually bring fresh flowers when they are going to visit a friend", who met a new graduate student towing a trailer in the parking lot with a handshake and "welcome to the Athens of the Midwest", who sent a Georgia O'Keefe calendar on a yearly basis to an Italian admirer of her work and in his later years "one day sent a small parcel through the post containing a diary of O'Keefe's, but without any accompanying card or note ... but there was no need," and who called those who were ill and sent small gifts.

Benton served as president of the American Orthopsychiatric Association (1965), the International Neuropsychological Society (1970), and secretary-general of the Research Group on Aphasia of the World Federation of Neurology (1971–78). He held appointments as visiting scientist or scholar at the University of Milan (1964), the Neurosurgical Clinic, Hospital Sainte-Anne, Paris (1968), the Hebrew University Medical School, Jerusalem (1969), the Free University of Amsterdam (1971), the University of Helsinki (1974), the Tokyo Metropolitan Institute of Gerontology (1974), the University of Melbourne (1977), L'Ecole des Hautes Etudes, Paris (1979), the University of Victoria, British Columbia (1980), the University of Minnesota Medical School (1980), and the University of Michigan (1986). He received honorary doctorates from Cornell College (1978) and the University of Rome (1990).

His awards include the Distinguished Professional Contribution Award from the American Psychological Association (1978), the Distinguished Service and Outstanding Contribution Award of the American Board of Professional Psychology (1985), the Outstanding Scientific Contribution of the International Neuropsychological Society (1981), the Samuel Torrey Orton Award of the Orton Dyslexia Society (1982), and the Distinguished Clinical Neuropsychologist Award of the National Academy of Neuropsychology (1989). In 1992 he received the Gold Medal Award for Life Achievement in the Application of Psychology from the American Psychological Foundation. The citation for this award reads in part: "For lifetime contributions that include pioneering clinical studies of brain-behavior relations."

Arthur Benton was predeceased by his wife Rita, a musicologist at the University of Iowa. He was the loving father of Raymond Benton (Nina), Abigail Sivan (Milton Harris), and Daniel Benton (Nancy Hauserman) and devoted grandfather of Jeffrey Benton, Ori Sivan (Claudia Regojo), and Ofer Sivan (Amber Neville). The internment was private. Donations should be made to: Arthur Benton-Manfred Meier Neuropsychology Fund, c/o American Psychological Foundation, 750 First Street N.E., Washington, DC 20002-4242.

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