

Allan Urho Paivio (1925-2016)

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Allan (Al) Paivio was born to Finnish immigrants, Aku Paivio and Ida Hanninen, in Northern Ontario in what is now Thunder Bay; an area of Canada where Finnish was more frequently spoken than English at the time. His father was a poet, playwright, and radical socialist journalist who wrote for Finnish-language newspapers and whose left wing orientation Al adopted throughout his life. Aku's most famous poem was "To my son is Spain", about his fears for, and pride in, Al's older brother Jules who joined the Canadian contingent of the International brigade to fight Fascism during the Spanish civil war and was the last living member of the MacKenzie-Papineau brigade when he died in 1913.

In 1928, Al's family briefly lived in Sudbury, Ontario, where his father worked on a paper called *Vapaus* (Finnish for "freedom"), before moving to a somewhat rustic 240-acre land grant at Tilton Lake outside the city. The young Al Paivio, who in winter often had to ski miles to school, was noted for his athletic prowess and his passion for a healthy lifestyle, traits that he maintained throughout his life. After serving in the Canadian Navy for the last two years of World War II, Al moved to Montreal with his wife, and high school sweetheart, Kathleen (Kay), to whom he was married for 50 years.

In Montreal, Al earned a B.Sc. in Physical Education from McGill University (1949) and opened one of the first gym and health studios in Montreal. Active as a body builder, he was awarded the title of "Mr. Canada" in 1948, an achievement he rarely discussed until later in his academic career because of his belief that such activities were denigrated by academics and would distract from his scholarly



achievements. Having launched a successful business, Al decided to pursue his love of psychology and applied to graduate school at McGill. Working under the supervision of Wallace Lambert, Al earned his Ph.D. studying "stage fright." Leaving McGill, Al went on to complete a post doc at Cornell University. He then took up his first academic position at the University of New Brunswick (UNB) before being lured to the University of Western Ontario by Mary Wright in 1963, much to the chagrin of the president of UNB and the glee of the president of Western. Al stayed at Western until his retirement.

Although Al published on a variety of topics, he is best known for his seminal research and theorizing on issues dealing with the representation and properties of mental images and verbal associative structures. While a graduate student at McGill, Al had started examining linguistic factors in learning, noting that concrete words served as better retrieval cues than abstract words in paired associate learning. He postulated that this effect was due to the fact that concrete words easily engaged mental imagery and, thus, better served as "conceptual pegs." This finding and subsequent work culminated in a classic paper in *Psychological Review* (1969) and the

elaboration of his well-known dual coding theory, presented in his book *"Imagery and Verbal Processes (1971).*

Dual-coding theory proposes that mental imagery and verbal processes are separable but inter-connected representational systems, each with their own testable properties. To convince the behaviourist sceptics of the day, Al initially approached the study of mental imagery from a strict operational perspective, arguing the only way to convince the scholars of the day of the psychological reality of mental imagery was to be a rigorous experimentalist and use the methodology with which they were familiar. He forcefully made this point in his 1975 CPA presidential address (in which he presented parts in French, passionate that the association must embrace both Canada's official languages). Though dual-coding theory has often been simplified as merely a theory of mental imagery, ignoring its larger representational context, one cannot underestimate the importance of this influential work or of his later research on the analog and embodied nature of mental imagery.

Al was among the most cited psychologists in the world during the 1970s for his research that, along with that of a few others, once again made mental imagery (and cognition) a respectable field of study after its banishment during the behaviourist interregnum. Over his career Al published about 200 empirical articles and chapters, and five books. Among his many awards and recognitions, Allan was appointed a Fellow of the Royal Society of Canada and was the third recipient of the CPA's "Donald O. Hebb Award for Distinguished Contributions to Psychology as a Science." Even in retirement, he continued to be an active scholar, publishing papers and books until near his passing.

Allan Paivio was a true gentleman, a loving family man, and a wise mentor. He is survived by his second wife Delores, and four of his five children.