Profiles in Military Psychology: Arthur Weever Melton

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Division 19 consists of a diverse group of scientists and practitioners committed to research and to the application of psychological research to military problems. Over the years, Division 19 has been shaped by the unique contributions made by researchers, professors, industrial/organizational psychologists, and clinical psychologists, among others. This edition of Profiles in Military Psychology features none other than experimental psychologist and previous Division 19 president, Arthur Melton.



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Arthur Weever Melton was born in Fayetteville Arkansas in 1906. At 18 years old, he moved to St. Louis to study under John A. McGoech at the University of Washington, and he ultimately earned his BA in 1928 (Underwood, 1979). He entered Yale focusing on verbal learning under the tutelage of Edward S. Robinson, and in 1932 he earned his Ph.D. in experimental psychology. He taught at Yale for three years while conducting what would today be considered visitor behavior research (a subsect of environmental psychology) at a local museum. Melton studied visitor's time spent at display paintings, called dwell time. He identified distinct differences between visitor's behaviors during the winter and summer seasons (Melton, 1935).

In 1932, the year he received his Ph.D., 29-year-old Melton became the Chairman of the department of Psy-

chology at the University of Missouri. In order to do so, Melton received a shining recommendation to take on the position by John McGoeth, the former Chair (Posner, 1992). Through Melton's leadership, the small and rigorous program became highly regarded and nationally recognized, producing students who frequently went on to complete Ph.D. training and earn strong reputations in their own rights. Simultaneously, Melton continued his research investigating interfering underlying processes between regularities of behavior. His ideas were hotly contested some 30 years later (Posner, 1992) indicative of theoretical pontification far ahead of its time. Despite his own background in the classical psychological system of Functionalism, Melton began to look at the internal processes related to memory as opposed to relying on strict observable phenomena. Through his studies of comparing two learning trials, he developed an approach to measure difficult constructs that are not overtly observable (Melton & Lackum, 1941). These methods contributed to additional studies measuring short-term memory years later both during and after WWII.

Melton also had an illustrious career in the US Military. Prior to the bombing of Pearl Harbor, Melton led a team of Army Air Corps research psychologists working to develop a battery of psychomotor tests designed to assess the perceptual-motor coordination and overall aptitude of pilot candidates. Further tests measuring complex coordination, speed of reaction, steadiness, balance, finger dexterity, and pursuit accuracy were curated or created to further pilot assessment and selection efforts (Daniel, Geldard, Greeno, & McKeachie, 1980). He initially served as the Chief of the Department of Psychology at the School of Aviation Medicine at Randolph Field, TX. Melton's tenure in the military directly led to the establishment of the Air Force Personnel and Training Research Center and multiple publications related to aviation psychology (e.g., psychomotor tests; Melton, 1944; Melton, 1947) and a robust overview of military psychology which was published in the American Psychologist (Melton, 1957). In all, Melton served in the United States Air Force (or Army Air Corps prior to 1947) between 1942 and 1957, leaving active duty service in 1946 at the rank of Colonel and continuing his service in the Reserves. Through his efforts, leadership abilities, and contributions to aviation psychology, Melton eventually rose to the rank of Brigadier General in the Air Force Reserve (Posner, 1992), which is exceptionally rare among military psychologists.

Melton established the Engineering Psychology Laboratory of the Willow Run Research Laboratories at the

University of Michigan in 1957 (Daniel, et al., 1980). Approximately one year later, he recruited Paul Fitts and created the Human Performance Center in the Department of Psychology which was a nationally recognized center for experimental psychology (Posner, 1992). Melton's work at the University largely focused on shortterm memory and verbal learning within the context of cognitive assessment. Melton (1963) produced a landmark publication related to a general theory of memory which promoted the continuity of short-term and longterm memory, a perspective that has been largely upheld over time (Underwood, 1979). During his time at Michigan, he was highly regarded as a great teacher of psychology who was both demanding and supportive of his students. While the minimum teaching requirement at the time was one course per term, Melton insisted on teaching three (Daniel et al., 1980). As a result of his commitment, Melton earned the inaugural award for outstanding graduate teaching at the University of Michigan, which he greatly treasured (Daniel et al., 1980).

Melton's organizational contributions are yet another area of positive impact. In fact, Melton played a substantial role in the early days of Division 19. In 1944, prior to the merger between the American Psychological Association (APA) and the American Association for Applied Psychology (AAAP), Dr. Melton served as Member at-large who was responsible for selecting the first elected Chair of Division 19 (Gade & Drucker,

2000). It wasn't until 1952 that the title "Chair" was replaced by "President" (Bray, 1952 as cited in Gade & Drucker, 2000). Melton himself served as Chair of Division 19 from 1948 to 1950, a two-year term as was customary until 1952 (Gade & Drucker, 2000). He also made a substantial impact on the *Journal of Experimental* Psychology where he served as editor from 1951 to 1962 (Daniel et al., 1992) and earned a reputation for holding high standards of scientific rigor (Underwood, 1979). He also served on the APA Publication and Communication Board from 1957 to 1960 and again from 1970 to 1974; he also served as chief editorial advisor for APA from 1975 to 1978 (Daniel et al., 1992). Finally, Melton served as President of the Midwestern Psychological Association in 1959 (Midwestern Psychological Association, n.d.), a title held by many other prominent psychologists such as B.F. Skinner and Harry Harlow. Melton's impact on the APA was so great that the APA library in Washington, DC is named after him.

Arthur W. Melton, like so many military psychologists, furthered the science of psychology in diverse and wideranging ways. Although he primarily served as an experimental psychologist, he was also a teacher, mentor, Chair, board member, editor, and Brigadier General. His impact on our profession, and our very society is profound. The Society named the Early Achievement Award after him. For these reasons and more, Arthur W. Melton is featured in this edition of Profiles in Military Psychology.



Picture from the dedication of the Melton Library

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