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INTRODUCTION TO SPECIAL ISSUE ON AGE, HEARING, AND SPEECH COMPREHENSION

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In July 2014, a group of colleagues, friends, and family traveled to Brandeis University to attend a symposium in honor of Professor Arthur Wingfield.[1] The topic was "Age, Hearing, and Speech Comprehension," reflecting the themes that have been central to Art's research program over the past several decades. This special issue of *Experimental Aging Research* is the result of the meeting, with each article having been contributed by one of the symposium speakers (all of whom trained with Art, or are colleagues with related research interests who have interacted with Art over the years).

Art has always been interested in many different facets of spoken language, as reflected in his training and research projects. He received a Master in Speech Pathology and Audiology from Northwestern University and a DPhil in Experimental Psychology from Oxford University. He joined the faculty of Brandeis University in 1968 in the Department of Psychology (replacing Ulric Neisser) and never left. Art has also had a longstanding interest in neuroscience, and when the Volen National Center for Complex Systems was formed, he was an eager participant (and eventually the director). The breadth of the contributions represented here mirror that found in Art's interests and expertise. *Experimental Aging Research* has been home to many of Art's studies over the years and seemed a fitting home for this collection of articles.

One of the reasons I enjoy studying speech comprehension is that it interfaces with so many other disciplines. I still remember my campus visit to Brandeis as a prospective PhD student. An undergraduate Learning and Memory course had convinced me that I wanted to study "memory," which I dutifully noted in my application. I explained this to Art, who heard me out and then mused about how interesting it was that listeners rely so much on memory during speech comprehension: memory for speech sounds, acoustic word form, concept representation, grammar, and so on. I was hooked.[2]

The articles in this issue are contributed by people who were similarly hooked by Art's combination of careful science, patient teaching, and subtle humor, either into joining his laboratory or as professional colleagues. The topics take us from basic speech perception to higher levels of complex interaction. A natural place to start understanding spoken

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[1] Information on the event can be found online: http://www.artwingfieldfest.com

[2] In fact, although I found Art's intellectual argument intriguing, I was more convinced that I wanted to work with him, regardless of what he studied.

language processing is studying speech comprehension in healthy young adults (Remez et al., 2016): A great deal about our perceptual systems functions similarly throughout adulthood, and understanding fundamental principles of auditory processing in young adults is in many ways a prerequisite for coming to terms with less ordinary cases. Hypotheses formed on the basis of studies in young adults can then be tested in older adults (Pichora-Fuller, Dupuis, & Smith, 2016; Schneider, Avivi-Reich, & Daneman, 2016), who frequently show greater variability in cognitive and perceptual processing. Studies of patients with aphasia or neurodegenerative disease are complemented by evidence from functional neuroimaging (Kuchinsky et al., 2016; Vaden et al., 2016) and provide the opportunity to incorporate neuroanatomical constraints into models for language processing. Finally, to move from laboratory-based language to something more closely resembling everyday communication, we need to understand speech at multiple levels of linguistic complexity, including discourse-level material (Stine-Morrow & Payne, 2016; Ward, Rogers, Van Engen, & Peelle, 2016) and the complex cognitive demands of interpersonal communication (Healey & Grossman, 2016). Space prevents anything more than a cursory treatment of these subjects—and many are not included—but the articles here can help to paint an outline for the diversity of topics to which speech comprehension is linked.

Of course, pursuing scientific excellence is a laudable goal, and those of us who trained with Art are grateful that he set such a good example in this regard. But far more important was how he taught us by example to be patient, caring, and thoughtful human beings. We count ourselves lucky to have him as a mentor, colleague, and friend.

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