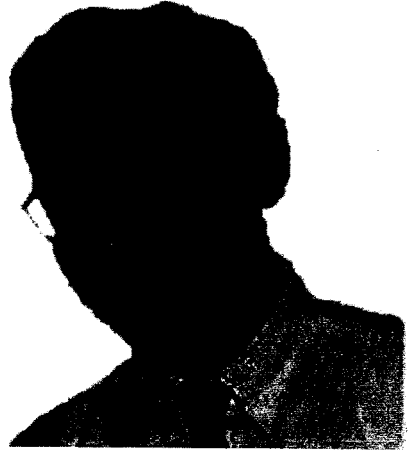


In Memoriam**Ignatius G. Mattingly, PhD****1927-2004***

A highly valued colleague, Ignatius G. Mattingly, Professor Emeritus of Linguistics at the University of Connecticut, Senior Scientist at Haskins Laboratories, and Fellow of the Acoustical Society of America, died March 5, 2004 at the age of 76. He was born November 22, 1927 in Detroit, Mich., USA. After a few years, his family moved to southeastern Connecticut where he did most of his growing up. He finished his undergraduate education at Yale University with the BA degree in 1947 and earned the MA degree in linguistics at Harvard University in 1959. In 1951, he married Emily Dimock.



After 6 years of service as an analyst with the National Security Agency, Ignatius joined the scientific staff of Haskins Laboratories as well as the English Department of the University of Connecticut in 1966. At the same time he resumed graduate study at Yale University, where he was awarded the PhD degree in 1968.

One of Ignatius' duties during his first year at the University of Connecticut was to chair an interdepartmental committee formed to advise the president of the institution on the advisability of establishing a department of linguistics. On its favorable recommendation, such a department was founded in the fall of 1967 by him, Philip Lieberman, and me. At its outset, obviously, the department was strongly biased toward experimental phonetics and involvement in research at Haskins Laboratories. Over the years, Ignatius worked loyally and diligently on the strengthening and broadening of

* I am grateful to Emily Mattingly, Patrick W. Nye, and David Michals for their information and thoughts. Helpful also were Matthew Mattingly's notes on an interview with his father in April 1999.

our academic program. In matters of curricular development, standards, and general policy, he had a great sense of decorum and showed sound judgment. He never stinted with time and energy in giving meticulous, detailed attention to the research work of graduate students under his supervision. Let me add that I myself always sought his services as an associate advisor on advisory committees formed for my own doctoral students.

We at Haskins Laboratories, then still in New York City, first became aware of Ignatius and his keen intellect in the 1960s when he and another representative of the National Security Agency (NSA), usually Ned Neuburg, visited us periodically to monitor contracts held by us with the United States Department of Defense. In that era those contracts supported most of our basic and applied research into the acoustics and perception of speech. Ignatius' thoughtful comments and penetrating questions kept us on the alert and served as a precursor to a long and fruitful collegueship that was to begin not long thereafter.

On October 8, 2004 a daylong program, 'Speech, Reading and the Linguistic Process: A Conference in Honor of Ignatius G. Mattingly,' was held at the University of Connecticut, with Diane Lillo-Martin as moderator. The following speakers and topics illustrate the breadth of Ignatius' scientific interests.

Carol Fowler: Introduction

Ned Neuburg: The Mattingly Legacy at NSA

Arthur S. Abramson: The Rationale for Speech Synthesis by Rule

Janet Dean Fodor: Prosody and Reading

Donald Shankweiler: Linguistic Awareness and Reading

Susan Brady: From Theory to Front Line: Current Practices in Reading Instruction

Carol Fowler: Reading and the Phonetic Module

Yi Xu: Demystifying the Myths – Ignatius and the Chinese Writing System

Laurie Feldman: Reading in Chinese: A Window on Phonological Processes

Michael Turvey: The Orthographic Depth Hypothesis: Twenty-Five Years Later

The main focus of the conference, as shown by the topics of 7 of the 9 speakers, was research into the nature of reading, work that loomed large for Ignatius in his latter years. Although this research obviously has a serious phonological component [e.g. Mattingly and Hsiao, 1999], for readers of *Phonetica* it behooves me to turn my attention to his accomplishments as a speech scientist deeply immersed in the phonetic and psychological aspects of the production and perception of speech. His greatest effort was not expended on experimental approaches to particular phonetic topics. Even a possible exception [Mattingly et al., 1971] was really an approach to the tantalizing question of speech as a special modality. Rather, he devoted his speech research to two broad and demanding themes: speech synthesis by rule and theories of speech perception. The former required very meticulous and formal attention to a mass of technical details; the latter drew upon his capacity for critical evaluation of the interdisciplinary experimental literature along with much deep thought.

Ignatius became intrigued with the challenges of speech synthesis by rule while working with John Holmes and John Shearme on British English as a guest researcher for the year 1963–1964 at the Joint Research Unit in Britain [Holmes et al., 1964]. Upon his return to the United States, his shift to American English for a continuation of the work led to his doctoral dissertation [Mattingly, 1968a] and a number of published articles [e.g. Mattingly, 1966, 1968b, 1981]. For him this undertaking was

important not only for its engineering applications but also as a testing ground for our ability to do a good job of synthesizing the sounds of a language for intelligible and psychologically acceptable running speech. He also argued that it is a test of the quality of the linguist's description of the phonology. The rules for synthesis and the rules and features posited for the phonology of the language ought to be compatible.

Ignatius was much taken with the somewhat controversial motor theory of speech perception espoused by Alvin M. Liberman and others at Haskins Laboratories, especially as it evolved into a model with articulatory gestures as the basic units of perception. Writing by himself or with Liberman, he produced a number of profound and provocative studies on this topic [e.g. Liberman and Mattingly, 1989; Mattingly, 1998; Mattingly and Liberman, 1969, 1990].

Ignatius is survived by his wife Emily, his son Matthew, and his daughter Constance, as well as by five grandchildren. Not only former students and close colleagues but also many others in the worlds of experimental phonetics and reading research will sorely miss the stimulating presence of Ignatius G. Mattingly.

Arthur S. Abramson (New Haven, Conn.)

References

- Holmes, J.N.; Mattingly, I.G.; Shearme, J.N.: Speech synthesis by rule. *Language Speech*. 7: 127–143 (1964).
- Liberman, A.M.; Mattingly, I.G.: A specialization for speech perception: Reply. *Science*. 244: 1530–1531 (1989).
- Mattingly, I.G.: Synthesis by rule of prosodic features. *Language Speech*. 9: 1–13 (1966).
- Mattingly, I.G.: Synthesis by rule of General American English (Doctoral dissertation, Yale University, New Haven, 1968a). [Also, Supplement to Status Report on Speech Research, Haskins Laboratories, April 1968].
- Mattingly, I.G.: Experimental methods for speech synthesis by rule. *IEEE Transactions on Audio Electroacoustics*. AU-16: 198–202 (1968b).
- Mattingly, I.G.: Phonetic representation and speech synthesis by rule; in Myers, T.; Laver, J.; Anderson, J.: *The cognitive representation of speech* (North Holland, Amsterdam, 1981), pp. 415–420.
- Mattingly, I.G.: Why did coarticulation evolve? *Behav Brain Sci*. 21: 275–276 (1998).
- Mattingly, I.G.; Liberman, A.M.: The speech code and the physiology of language; in Leibovic, K.N.: *Information processing in the nervous system* (Springer Verlag, New York, 1969), pp. 97–117.
- Mattingly, I.G.; Liberman, A.M.: Speech and other auditory modules; in Edelman, G.M.; Gall, W.E.; Cowan, W.M.: *Signal and sense: Local and global order in biological maps* (Wiley, New York, 1990), pp. 501–520.
- Mattingly, I.G.; Hsiao, P.: Are phonetic elements in Chinese characters drawn from a syllabary? *Psychologia*. 42: 281–289 (1999).
- Mattingly, I.G.; Liberman, A.M.; Syrdal, A.M.; Halwes, T.: Discrimination in speech and nonspeech modes. *Cognit Psychol*. 2: 131–157 (1971).