ILSE LEHISTE

Ilse Lehiste, president of the LSA in 1980, died after a brief bout with pneumonia on December 25, 2010, at the age of eighty-eight years, eleven months.[1] She was a key figure in the history of Linguistics in the United States, leading in the establishment of instrumental phonetics as one of its academic subdisciplines. Ilse's[2] accomplishments were enormous and formidable, in a wide range of areas of scholarship and research—instrumental phonetics, historical linguistics, prosody, poetics, Estonian studies, Serbo-Croatian studies, and Germanic philology. (She was also a polyglot, picking up new languages throughout her life, building on the Estonian, German, and Russian of her young days.)

LIFE. Ilse was born on January 31, 1922, in Tallinn, Estonia. Her life was dramatically changed by World War II. Her brother died in the war, having been conscripted to fight in the Soviet Army, and in 1944, the twenty-two-year-old Ilse fled to Germany with her mother and father as the Soviet Army moved to retake Estonia from the Germans. She left behind her bright future in Estonia and everything she knew, on half an hour's notice. While living in refugee camps, she attended the University of Hamburg, earning a Doctor of Philology in 1948 with a thesis on Old Norse.[3] During this period her father died. With the help of the Lutheran church, Ilse and her mother immigrated to the United States in 1949. They initially settled in a small town south of Seattle, Washington, where Ilse's first job was as a dish-washer, and then later she worked as an accompanist in a dance studio.

Ilse taught German as an Associate Professor of Modern Languages at Kansas Wesleyan for one year (1950–51) and at the Detroit Institute of Technology for five years (1951–1956). In 1959, Ilse earned her second doctorate, a Ph.D. in Linguistics from the University of Michigan, and after earning that degree, she continued working there as a Research Associate with Gordon E. Peterson in the department of Speech Communication until 1963. During this period they published their seminal studies on vowel duration (Peterson & Lehiste 1960), 'intrinsic' fundamental frequency (Lehiste & Peterson 1961b), and amplitude variation (Lehiste & Peterson 1961c) in the Peterson and Barney (1952) corpus. It was a great delight to Ilse that in later years the results of these studies could be mentioned as phonetic common knowledge without being cited. The acoustic segmentation criteria that they developed in their study of diphthongs and glides (Lehiste & Peterson 1961a) are still cited as a standard today.

The measurements for these studies, as well as those for her dissertation monograph (Lehiste 1960), were made using one of the few spectrographs then in existence. Decades later, Ilse often described 'the special excitement that the availability of the

[1] Facts, remembrances, and some of the text in this note have been contributed by a number of colleagues and friends, including Craige Roberts, Linda Shockey, Mary Beckman, Arnold Zwicky, Jaan Ross, Brian Joseph, Stella Karolin, and Veiko Vihuri.

[2] To her students she was always 'Dr. Lehiste'. I recall the specific correspondence, after my Ph.D. had been granted, in which Dr. Lehiste invited me to call her Ilse.

[3] The final course that she taught at Ohio State (in 1988) was on Old Norse, closing the circle, she said, with her first teaching assignment.

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spectrograph created—we knew that whatever we were looking at, nobody had seen before. I imagine a biologist might have felt the same way when handed the first microscope' (Beddor & Catford 1999:59).

In 1963, Ilse Lehiste joined the Department of Slavic Languages and Linguistics at the Ohio State University as an Associate Professor. Also in 1963 she published *Accent in Serbocroatian*, with Pavle Ivić. About a year later, her mother, who had moved to Columbus with her, died. *Some acoustic characteristics of dysarthric speech* was published by Karger in 1965 (1965a), and *Consonant quantity and phonological units in Estonian* by Indiana University/Mouton in 1966. In 1965, Ilse was a founding member of the Ohio State Department of Linguistics, and she served as its first chair until 1971. In 1970 she was the director of the Linguistic Society of America's summer institute held at Columbus, and she also taught a course at the institute on 'Suprasegmentals'. During the early period of her tenure at Ohio State, Ilse established a publishing relationship with MIT Press that continued over the next twenty years. The first of her books with MIT was a collection of seminal articles on acoustic phonetics (*Readings in acoustic phonetics*, 1967). This was soon followed by her monograph on *Suprasegmentals* (1970), which was based on her summer institute course. Later books published with MIT Press were *Principles and methods for historical linguistics* (with Robert Jeffers, Jeffers & Lehiste 1979), *Word and sentence prosody in Serbocroatian* (with Pavle Ivić, 1986), and *Lectures on language contact* (1988). One of Ilse's main accomplishments in her professional life was as a department-builder. Her term as the first chair of Linguistics at Ohio State was key in setting the direction and tone of the department as a major center of theoretical linguistic research and training, while avoiding theoretical monoculturalism, or party-line thinking. It should be emphasized that in the late 1960s she had very few, if any, female role models for the type of leadership position that she occupied.[4] Her role during her second term as chair (1985–1987) was again pivotal as she established a pattern for graceful transition of leadership to a new generation.

Ilse retired in 1987, and was succeeded in phonetics teaching at Ohio State by Mary Beckman, who joined the department in 1985. After her retirement, Ilse continued to make the Department of Linguistics in Columbus her base for a long and productive research career as Professor Emerita. Her main research activity (with NSF funding over many years) was the phonetic investigation of metrical structure in orally produced poetry. The project dealt with the rhythmic structure of poetry as compared to the rhythm of spoken language in general, and tested the basic assumption that the suprasegmental system of a language is crystallized in the metric structure of its traditional poetry. In retirement, she also fulfilled her ambition to visit all of the continents of the world, and could usually be seen at professional meetings carrying a guidebook for the host city—with a thoughtful plan for explorations before or after the professional sessions.

She was the author, co-author, or editor of twenty books and about 200 articles. Her keynote lecture on the occasion of receiving the 2002 ISCA Medal for Scientific Achievement touched on just a few of her many contributions. Other honors that recog-

[4] Much later, around 1987, I recall attending a university meeting involving Ilse and a university administrator who seemed to have a listening problem. As we left the meeting Ilse muttered, 'sexist pig!'. This was a lesson for me about what it might have been like for her in the early years. She was a long-time member of the OSU Faculty Club, and enjoyed hosting students and other faculty members there. She said that as a female department chair in the 1960s and 1970s she was obliged to host visitors, but had no wife at home to prepare dinner for the guest (as was apparently expected). She also one time mentioned that during the week she ate 'one hot meal a day—and someone else cooks it'. A rumor, current among graduate students at Ohio State in the late 1980s, was that Ilse was the highest paid woman on the state government payroll in Ohio.

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nized her scholarship included four honorary doctorates, from Essex University in 1977, from the University of Lund in 1982, from Tartu University in 1989, and from the Ohio State University in 1999. She was a Fellow of both the Acoustical Society of America and the American Academy of Arts and Sciences, and she was elected to be a Foreign Member of both the Finnish Academy of Sciences and the Estonian Academy of Sciences.

After her retirement and without interruption until her final short hospitalization in the last month of 2010, she continued to contribute new knowledge through her work on rhythm in poetry and music and its relationship to rhythm in prose (e.g. Lehiste 2001, Lehiste et al. 2008).

INTELLECTUAL LEGACY. In discussing the history of phonetics, Ohala (1991) made a very useful distinction between taxonomic and scientific phonetics—tracing both of these trends in phonetic studies through several centuries of research. Linguistic phonetics of the mid-twentieth century in America had a largely taxonomic focus, and this tendency may have contributed to the estrangement of phonetics and phonology in this time period. There developed a sense that phonetics, as a largely taxonomic enterprise, had very little to contribute to a scientific theory of language sound systems. The most successful phoneticians of the period were those who addressed this estrangement. Refusing to be sidelined as mere taxonomists, they championed the linguistic relevance of scientific phonetics. Peter Ladefoged (1975, 1984) engaged with the theory of phonological distinctive features, establishing the idea that the basic building blocks of phonological structure emerge from phonetic structure. Björn Lindblom (1990; Liljencrants & Lindblom 1972, Lindblom et al. 1995) pointed the way toward phonetic explanations of phonological universals through processes of contrast maintenance and enhancement. John Ohala (1975, 1981, 1993) provided a listener-based explanation of how phonetic processing shapes phonology (as speech production processes introduce variation, and speech perception processes phonologize particular variants). Ilse Lehiste also belongs on any list of the champions of scientific phonetics—and takes a special place because her approach was unique and successful.[5]

As the title of her dissertation suggests, Ilse made her first mark in the phonetic sciences as one of the small handful of phoneticians in North America who were already doing important foundational work on prosody in the early 1960s, a time when much of the focus on that continent was on uncovering the acoustic correlates of consonant and vowel features. While her dissertation was on English, she had also already begun the work that led to her fruitful collaboration with Pavle Ivić on the complex relationships between quantity and tone in standard Serbian (Lehiste 1961, Lehiste & Ivić 1963) as well as her sole-authored work on acoustic correlates of quantity contrasts in the Uralic languages (e.g. Lehiste 1965b). Her monumental review monograph on suprasegmentals (Lehiste 1970) summarized her first two decades of work in these areas, but it also did much more, synthesizing results from the psychoacoustics literature on the perception of pitch, loudness, and duration with results from nearly all of the then extant research in acoustic phonetics on tone, accent, and quantity.

Over the next two decades, she continued to work on the phonetics of quantity and word accent at the same time that she turned her attention to speech prosody above the word and to the ways in which sentence rhythms and melodies reflect syntactic struc-

[5] Ilse often taught by slogan, and one of her favorite slogans emphasizes her role as a scientific phonetician—she was quick to remind students of an expression attributed to Galileo, 'Measure what is measurable, and make measurable what is not so'.

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ture and discourse structure. Her seminal articles and books from those decades (e.g. Lehiste 1972, 1977, Lehiste et al. 1972, Lehiste & Ivić 1986) are still cited today. She also continued to make important contributions in the area of her first doctorate. She brought her knowledge about prosody to bear on the connection between language contact and language change, as she studied and wrote about the effects of contact on a language's prosodic system, both in the Baltic Sprachbund and in the Balkans.

Ilse's research on speech prosody spanned a range of interests,[6] including phonetics (Lehiste 1960, 1961), phonology (Lehiste 1965b, 1977), syntactic parsing (Lehiste et al. 1972), historical linguistics (Lehiste 2001), poetry (Ross & Lehiste 1994, 1998, 2001), and language documentation (Lehiste et al. 2008). The range of linguistic topics that she addressed in her research on prosody was important because it helped to break down barriers between phonetics and other subfields in linguistics. While distinctive feature theory and generative theories of phonological rule systems had much to say about consonants and vowels, the prosodic aspect of language was more open for fresh investigation, free from prior commitments about the relationship between phonetic properties and phonological descriptions. It is significant then that some of the earliest and most influential work in laboratory phonology was in prosody (Pierrehumbert & Beckman 1988, Kingston & Beckman 1990), and arguably, phonetic studies of prosody were instrumental in establishing phonetics as one of the major subdisciplines in linguistics in American universities. Ilse Lehiste, through her pioneering research on prosody and her identification as both a linguist and a scientist, was a key figure in this development in American linguistics.

In addition to an influential research profile, Ilse Lehiste influenced linguistics by championing and guiding her students and other younger researchers. A signal fact about Ilse as a public figure in linguistics was that she looked for people whose cast of mind and ideas she admired and then worked hard, often behind the scenes, to use her influence to advance their careers. Her students describe her courses as 'fascinating, demanding, fun, rewarding', and her high standards as a teacher and mentor were always motivating and challenging. Her career advice was unmistakably direct, while retaining fundamental respect for the autonomy of the student. She possessed a brisk self-confidence, and did what she could to inspire the same in others. 'Always behave as if you were the person you want others to think you are' was standard advice, followed by the Estonian version: 'If the dog does not hold up its own tail, who will hold it up for him?'. This was particularly important advice in the early days of her research career, when opportunities for women in academia in the US were rather more circumscribed than they are today.

Ilse Lehiste also made invaluable contributions to linguistics teaching in the US. These included not just her two textbooks (Jeffers & Lehiste 1979, Lehiste 1988), but also her careful selection of fundamental readings in acoustic phonetics (Lehiste 1967) that was the standard primer for a quarter of a century, until the publication of a three-volume collection by the Acoustical Society of America (Kent et al. 1991, Miller et al. 1991, and Atal et al. 1991).

Prof. Craige Roberts spoke for many of us who knew Ilse when she wrote: 'Ilse Lehiste was one of the most courageous and adventurous people I ever met, with a quick wit and razor sharp critical capacity, a passion for the truth, and an unfailingly bright and dignified manner'. Ilse toasted a retiring colleague—reminding us all 'Once a linguist, always a linguist'. She lived that to the end, and retained her enthusiasm for

[6] She often commented that confining one's research to consonants and vowels was 'boring'.

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the good things of life—ideas, food, music, and travel, and the endless foibles of humans. Her colleagues, friends, and students feel her loss. [KEITH JOHNSON, *University of California, Berkeley*.]

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