## Ladefoged, Peter

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Peter Ladefoged (1925–2006) was one of the great phoneticians of the 20th century, a pioneer in instrumental phonetic fieldwork who was equally interested in theoretical linguistics, especially distinctive feature theory. During his career, Ladefoged produced 10 books and over 140 other publications.

Born in Sutton, Surrey, England, he attended the University of Cambridge from 1943 to 1944, when his education was interrupted by war service in the Royal Sussex Regiment. In 1947 he resumed his education at the University of Edinburgh, where he received an MA in 1951 and a PhD in 1959. He studied phonetics with David Abercrombie, who himself had studied with Daniel Jones and was thus connected to Henry Sweet. Ladefoged's dissertation was on *The Nature of Vowel Quality*, specifically on the cardinal vowels and their articulatory versus auditory basis (Ladefoged, 1962). At the same time, he began important research projects with David Broadbent, Walter Lawrence, M. Draper, and D. Witteridge, with his first publications appearing in 1956. His 1957 paper with David Broadbent, "Information Conveyed by Vowels," was particularly influential (Ladefoged & Broadbent, 1957).

In 1959–60 Ladefoged taught in Nigeria, and thus began his lifelong commitment to instrumental phonetic fieldwork. He returned to Africa in 1961–2 to do the work that resulted in *A Phonetic Study of West African Languages* (Ladefoged, 1964). In its introduction he wrote,

I do not know of any previous attempt to use data provided by palatograms, linguagrams, casts of the mouth, photographs of the lips and spectrograms all of the same utterance, supplemented by tracings of cine-radiology films and pressure and flow recordings of similar utterances of the same word. (Ladefoged, 1964, p. xvi)

With phonetic descriptions of 61 languages, this work remains unique. Ladefoged also was part of a Ford Foundation project in East Africa that resulted in the 1972 book *Language in Uganda*, which aimed to describe for the Ugandan government the current language situation in the country so that the government (not linguists) could arrive at a language policy, for example, regarding a national language and language teaching (Ladefoged, Glick, Criper, Prator, & Walusimbi, 1972).

When not in Africa, Ladefoged taught at Edinburgh until he moved permanently to America in 1962, joining the UCLA English department. In 1966 he moved to the newly formed Linguistics department, where he established, and directed until 1991, the UCLA Phonetics Laboratory, which became the most prominent linguistic phonetics laboratory in the world. Not long after he arrived at UCLA, Ladefoged was asked to work as the phonetics consultant for the 1964 movie *My Fair Lady*. He advised on equipping Henry Higgins's phonetics lab, he made all the phonetic transcriptions seen on-screen, and it is his voice heard producing the vowel sounds.

During his career Ladefoged became a worldwide field linguist, visiting Nigeria, Botswana, Ghana, Uganda, Tanzania, Sierra Leone, Senegal, India, Yemen, Papua New Guinea, Nepal, Thailand, Brazil, Mexico, Australia, Korea, Scotland, the Aleutians, and China. Much of his fieldwork remains unique to this day. Fieldwork on little-studied

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sounds and instrumental laboratory phonetics were two cornerstones of Ladefoged's career. He loved laboratory phonetics, and instrumental analysis was always a key component of his fieldwork. Many data collection and analytic techniques in the field were originated or refined by him (and often tried out on himself). His instantly classic Sounds of the World's Languages (with Ian Maddieson) summarized his knowledge of all the sounds he had studied, and remains the definitive reference work (Ladefoged & Maddieson, 1996). His 2003 book Phonetic Data Analysis: An Introduction to Phonetic Fieldwork and Instrumental Techniques teaches other linguists his methods (Ladefoged, 2003).

Much of Ladefoged's fieldwork contributed to documenting the phonetic properties of endangered or otherwise under-studied languages, and he served on the board of directors of the Endangered Language Fund. His field recordings and notes have been digitized and are publicly available online (http://archive.phonetics.ucla.edu/). However, Ladefoged was not a champion of language preservation for its own sake. Controversially, he believed that linguists should not judge or try to influence speakers' decisions to give up a minority language in favor of greater education and opportunity for their children, or in favor of national unity over tribalism. "It is paternalistic of linguists to assume that they know what is best for the community" (Ladefoged, 1992, p. 810).

However, the ultimate aim of his studies of the world's sounds was to understand what sounds are possible in languages. His particular passion was the theory of phonetic features for representing phonological contrasts: What features should be proposed in order to distinguish all the contrasts of the world's languages? Should these features be articulatory or auditory or some of each? A related concern was the International Phonetic Alphabet: Ladefoged instigated its expansion in the early 1990s to include symbols for more sounds, he was a key figure in the preparation and publication of a new Handbook of the IPA (International Phonetic Association, 1999) describing the principles behind the alphabet, and he worked to ensure that computer fonts of the alphabet would be widely available.

Much of Ladefoged's early laboratory research on English was in the area of speech production, from electromyography of speech respiration to tongue positions of vowels to articulatory-acoustic modeling. While much of this research had potential clinical applications, Ladefoged's own original motivation was modeling speech production, first in hardware and later in software. In turn this led to an interest in applied phonetics for speech synthesis by computer and for speech technology more generally. Finally, over the years Ladefoged consulted on many cases of forensic speaker identification, especially cases involving "voiceprinting." He argued that it was generally not possible to be sure that two voice samples were from the same person.

Ladefoged was also a dedicated and successful teacher, winning the UCLA Alumni Association's Distinguished Teaching Award in 1972. His 20 PhD students included such influential figures as Vicki Fromkin, John Ohala, Ian Maddieson, Louis Goldstein, and Cathe Browman. His textbook A Course in Phonetics (now coauthored with Keith Johnson) is the standard in phonetics (Ladefoged, 1975). It draws on his extensive fieldwork experience and has shown generations of students the richness of linguistic sounds. Ladefoged developed computer-based teaching materials for this and other courses before this practice was common, materials now used online all over the world.

His many honors include the 1985 Festschrift edited by Vicki Fromkin, *Phonetic Linguistics*: Essays in Honor of Peter Ladefoged for his 60th Birthday; the UCLA College of Letters and Sciences Faculty Award in 1991; the Gold Medal at the XIIth International Congress of Phonetic Sciences in 1991; the Silver Medal in Speech Communication of the Acoustical Society of America in 1994; honorary doctorates from the University of Edinburgh in 1993 and from Queen Margaret University, Edinburgh in 2002; and the special session "Phonetic Linguistics: Honoring the contributions of Peter Ladefoged" at the October 2005 meeting of the Acoustical Society of America. He was president of the Linguistic Society of America

in 1978, of the Permanent Council for the Organization of International Congresses of Phonetic Sciences in 1983–91, and of the International Phonetic Association in 1987–91. (Also see Peter Ladefoged's Web page at www.linguistics.ucla.edu/people/ladefoge/)

**SEE ALSO**: Abercrombie, David; Endangered Languages; International Phonetic Alphabet; Jones, Daniel; Technology and Phonetics

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## **Suggested Reading**

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