The Winners of the Okawa Prize

Citation

For outstanding contributions to the fundamental research and development concerning machine translation, including chart parsing and functional unification grammar

Dr. Martin Kay

Positions and Organizations:

Professor Emeritus, Stanford University Honorary Professor, Saarland University

Degree: Ph.D. (University of Cambridge, 2011)

Date of Birth: July 31, 1935

Brief Biography:

1955 Matriculated Trinity College, Cambridge

1958 Graduated Cambridge with BA

1958 Cambridge Language Research Unit

1961 Mathematics department, RAND Corporation

1972 Professor and Chair of Department of Information and Computer Science, University of California, Irvine

1974 Xerox Palo Alto Research Center

1984-2014

Chair of the International Committee on Computational Linguistics

1985 Professor of Linguistics, Stanford University

2011 Ph. D. awarded at Cambridge

Main Awards and Honors:

1982 Honorary doctorate, University of Gothenburg

1999 Honorary Professor, University of the Saarland

2005 Lifetime Achievement Award, ACL

2008 Honorary doctorate, University of Geneva

Books

His professional papers are collected in "Collected Papers of Martin Kay: A Half Century of Computational Linguistics (CSLI Studies in Computational Linguistics)" edited by Dan Flickinger and Stephan Oepen in CSLI Studies in Computational Linguistics (2010). Selected papers from this book were submitted to Cambridge in lieu of a thesis, resulting in the granting of a Ph. D. in 2011.

- "Linguistics and Information Science" with Karen Spark Jones.
 Academic Press, 1973.
- Verbmobil: A Translation System for Face-to-Face Dialog (Center for the Study of Language and Information - Lecture Notes) 73rd edition by Martin Kay, Jean Mark Gawron, and Peter Norvig (1992), CSLI Lecture Notes (33), Center for the Study of Language and Information.
- "Translation: Linguistic and Philosophcal Perspectives", Volume 221 of CSLI publications: Center for the Study of Language and Information.

Main Achievements:

Dr. Martin Kay is a professor of linguistics (emeritus) at Stanford University. For many years, he was also a research fellow at the Xerox Palo Alto Research Center. He made a number of fundamen-

tal contributions to computational linguistics, including chart parsing, unification grammar, and applications of finite-state technology, notably in phonology. He has been an intermittent worker on, and skeptical observer of, machine translation since 1958. He argues that fully automatic, high quality machine translation can never be achieved until a fully automatic artificial intelligence, with the same capabilities is also achieved.

There being no program in linguistics in Cambridge when he was there, Dr. Martin Kay was admitted as a student of Modern and Medieval languages, specifically French and German. During his last term, in 1958, he met Margaret Masterman, who ran the Cambridge Language Research Unit (CLRU), which was engaged in research on machine translation for the United States National Science Foundation. He was sufficiently intrigued by their projects, and with his enthusiasm, that he was engaged as a junior assistant. There was just one computer in Cambridge at the time, and Dr. Kay had no access to it.

In the spring of 1960, Dr. Kay was invited to visit the Rand Corporation in California for six months, which he did, starting in January, 1961. He, in fact, never returned from California, remaining at the Rand Corporation for some ten years and becoming the head of the linguistic research group when David Hays left to start a linguistics department at the University of New York, Buffalo.

In 1972, Dr. Martin Kay was appointed professor and chair of the department of Information and Computer Science at the University of California, Irvine, a position that he held for two years before joining the computer science laboratory at the Xerox Palo Alto Research Center. He started working regularly with Ronald Kaplan, with whom he had become acquainted while at Rand. This collaboration was a major factor in some of Dr. Kay's most important achievements, particularly chart parsing and functional unification grammar.

In 1985, Dr. Kay obtained a half time appointment as professor of Linguistics at Stanford where he taught computational linguistics, dropping back to half time at Xerox. When he left Xerox, he continued his half-time position at Stanford and started teaching for three months a year in the University of the Saarland, which made him an Honorary Professor in 1999.

For outstanding contributions to the fundamental research and development concerning machine translation, including chart parsing and functional unification grammar, Dr. Martin Kay is hereby awarded the Okawa Prize.