

A lunch with Bruce Wydner

Some time last autumn I received a telephone call from Bruce Wydner, inventor of the Weidner (the family spells its name in different ways) machine translation system. The translation business and Bruce Wydner had lost touch with one another in recent years, and it was obvious that both sides had a lot of catching up to do. We arranged then and there to meet for lunch when I made my trip to Provo.

Over lunch in one of Provo's finest restaurants I took the opportunity to ask Bruce how he came to create the Weidner MT system, a story which, to the best of my knowledge, has never been told.

First, however, he told me the story of the Sarnoff forecast. Speaking in 1961, David Sarnoff, the then chairman of the giant American conglomerate RCA, forecast that by 1978 automatic translation by computer would be a reality. To members of the LDS Church involved in language work, and trying to make automatic translation a reality, the Sarnoff forecast took on something of the nature of a prophecy, and the matter was referred to in a conference of the BYU faculty on September 12 that year. On September 12, 1978, 17 years later to the day, Bruce Wydner gave the first successful demonstration of what was to become the Weidner machine translation system.

Bruce Wydner first became interested in, not to say absorbed by, languages when called by the LDS Church to go "on a mission", which in his case meant two and a half years in Finland. On returning to the United States, he found no difficulty in acquiring other languages, and began to reflect on the methodology of language learning. He discussed his ideas with Gordon B. Hinckley, then in charge of mission training for the LDS Church, and now a member of the First Presidency of the Church. As a result of the prompting in this conversation Bruce produced his first book, *Learn to read Spanish in 24 hours!* This

book he presented to the Missionary Training Centre.

The methodology is too complicated to explain here (Bruce gave me a copy after the lunch), but it is an attempt to marry Western concepts of language, based on grammatical structure, with Eastern concepts, based on the single "pictureable thought".

In the 1970s Bruce heard that the Brigham Young University Translation Science Institute was trying to create a machine translation system (the ALPS system), and this set him thinking. His first thoughts were that his language learning program could well work on a computer. In fact, he thought, it could lead to new departures in the world of learning languages; he could visualise a new way of teaching the world how they could learn different languages the way that the Japanese learn to read their characters.

The germ of the idea of what became the Weidner machine translation system came to him during a family picnic lunch on a remote shore of the Great Salt Lake. He recounted how he went off for a walk in the moon-like bare landscape, and worked out his whole approach.

By September 12 1978 he was ready to demonstrate his system, and he invited two then-members of the Board of Directors of the American Translators Association, Leland D. Wright Jr and Tom Baumann, to a demonstration in Provo. He invited them to provide him with any sentence for translation, and the system worked first time.