

NOTE

Zdeněk Kirschner died

Petr Sgall

One of the most active and most systematic researchers of the Prague group of computational linguistics, Dr. Zdeněk Kirschner, born January 15, 1924, died on the Christmas Eve 2008, three weeks before his 85th birthday.

Zdeněk joined our research group in the spring of 1970, after his return from a longer stay in Tanzania, where he, among other things, was engaged in the education and cultural orientation of the fighters for the freedom of Mosambique; some of them later visited him in Prague as esteemed representatives of their country and members of its government.

One of the first questions Zdeněk had to answer after his arrival concerned, as it was usual in the given historical situation, was his attitude towards the Soviet led invasion of Czechoslovakia. Since he did not approve this event, he was excluded from the communist party. Even so, he was allowed to apply for a position at Charles University, where twenty years earlier he obtained his PhD. degree in English studies. He then had to decide between two options at the Faculty of Arts, one of which was to join the then established institute oriented at Ibero-American studies and the other concerned our invitation to the research group represented at that time as the Laboratory of Algebraic Linguistics. We were glad that he chose the latter possibility, and luckily we were quick enough to accept him before the political difficulties became too heavy not only for him, but also for us.

Due to his exclusion from the communist party it was impossible to quote him as the author of his contributions and thus we included the first of them as an anonymous appendix to the volume *Automatische Textenbearbeitung* (Prague, Matematicko-fyzikální fakulta Univerzity Karlovy 1974, pp. 86-156. It constitutes an extremely systematic and detailed analysis of the functions of the English preposition in in different contexts, which even today can serve as an important source of relevant insights (in case of interest, the text may be copied and shared).

Most of Zdeněk's further contributions appeared in the internal series which followed this volume, namely *Explizite Beschreibung der Sprache und automatische Textbear-*

beitung (EBSAT), with a parallel Russian title. The first of these (again published anonymously) was his rich and many-sided dictionary of the terminology of computational linguistics (*Terminologisches Wörterbuch*, 1975), republished later in Poland in an enriched form by a group of authors under the editorship of K. Polański (1985). Already the original version was based on English terms, but it contained also their equivalents in French, German, Russian and Czech, as far as these equivalents existed.

Later, Zdeněk concentrated on issues of English-to-Czech machine translation and developed a successful system, based on an ingenious analysis of English morphemics and syntax, overcoming the difficulties connected with the absence of inflection in English, i.e. with the fact that English word forms by themselves mostly do not identify their functions without context (see Kirschner 1982;1984;1987).

Another highly important result of Zdeněk's research concerned information retrieval: His system MOSAIC was designed to account for automatic extraction of significant terms from Czech texts on the basis of the richness of the language in morphemic endings and derivational suffixes (see Kirschner 1983; Kiršner i Buraneva 1976). He worked on this approach, and also on its application to German, together with P. Pognan (Paris), before this cooperation was made impossible by some of our "coordinators" of that time, who suspected that in this way important information could escape to the imperialist western world.

Zdeněk was a wonderful personality, with a great moral and human influence on all his colleagues, on all of us. He has educated several of his followers who shared with him his involvement in natural language processing, be it on machine translation (let us mention e.g. Alexandr Rosen, a nowadays senior research worker at the Faculty of Arts of Charles University) or on information retrieval from full texts (e.g. Hana Vernerová). After having reached the age of 65, Zdeněk could only continue his collaboration with our research group as a retired specialist. Even so, his contributions played an important role in our work, and it can be only understood as our fault if we did not always exploit his efforts as they deserved. We all will miss his working spirit, enthusiasm, stimuli and good humour.

References:

- EBSAT: Explizite Beschreibung der Sprache und automatische Textbearbeitung, Mathematisch-fyzikální fakulta Univerzity Karlovy, Prague
(Kirschner Z.) (1975): *Terminologisches Wörterbuch. EBSAT 1.*
Kirschner Z. (1982): *A dependency-based analysis of English for the purpose of machine translation. EBSAT 9.*
Kirschner Z. (1983): *MOSAIC – A method of automatic extraction of significant terms from texts. EBSAT 10.*
Kirschner Z. (1984): On a dependency analysis of English for automatic translation.
In: P. Sgall (ed.): *Contributions to functional syntax, semantics and language comprehension*, Prague:Academia, 335–358.

- Kirschner Z. (1987): APAC 3-2: *An English-to-Czech machine translation system*. EBSAT 13.
- Kiršner Z. i Buraneva E. (1976): Ob odnom sposobe avtomatičeskogo indeksirovanija. *Naučno-tehničeskaja informacija, Serija 2, 9*, Moskva.
- Polański K., ed. (1985): A terminological dictionary of algebraic linguistics. Katowice: Uniwersytet Śląski.

