

6 • 8 Thailand

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The activities on the machine translation in Thailand started around 1980 when Prof. B. Vauquois, the director of GETA (Group d'Etudes pour la Traduction Automatique) of Grenoble University in France approached the Ministry of University Affairs (MUA) in Thailand. The aim was to propose an English-to-Thai translation project using the Grenoble system called ARIANE. In 1981, MUA appointed a research team consisting of representatives from seven local universities to conduct the joint research project. The team has studied and analyzed the surface structure and the deep structure of the Thai language to serve as a target language for ARIANE. The results of the study was also claimed to be machine independent, although the experiments were done on an IBM mainframe. Combinations of techniques were used in the analysis and the transfer technique was employed (Kancharawan 1986).

During the same period, other studies were carried on independently for example at AIT (Asian Institute of Technology), KMIT (King Mongkut's Institute of Technology) and KU (Kasetsart University) in the forms of reports and thesis for Bachelor/Master degrees (Kereto 1985, Watarapa 1986, Pongchaidecha 1986, Tepmongkorn 1986). Various techniques were examined i.e. preference semantics (Kerero 1985) augmented transition network (ATN) and conceptual dependency (Watarapa 1986, Pongchaidecha 1986). A basic approach to Thai-to-English was also done i.e. word separation (Tepmongkorn 1986). Other related research activities which are now actively carried out

are Thai word processors and Thai character recognition (Kimpan 1987). The Thai word processor are now commercially available. The character codes have been already standardized by Thai Industrial Standards Institute, Ministry of Industry.

In summary, the machine translation activities in Thailand have been active since 1980 at both the international level and the national level. The ARIANE project seems to reveal the various Thai language features that are suitable for machine translation. Thai researchers have already familiarized themselves with the language theories such as the transformational theory, the case theory and the structural theory. The "meaning" theory such as the conceptual dependency is already understood (Shank 1975) although the depth of the analysis has not yet reached the so-called "interlingua".

Finally, it might be worthwhile to mention here that the success of any R&D project is not merely based on the technical issues. The management, the supports, the rewards and the definite objectives also play very critical roles in contributing to the success of the project. Ministry of Science, Technology and Energy has now set up a national project on natural language processing which also includes the machine translation. It is expected that there will be not only the main machine translation product but also various form of by-products from this national project, for example, the Thai OCR (Optical Character Reader), voice input/output, two-byte Thai character code, dictionary etc.

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