MACHINE TRANSLATION SYSTEM AT MAZDA

Norihiko Saeki
Mazda Motor Corporation
Hiroshima, Japan

As a part of our management strategy, we are promoting overseas local productions, the purchasing of foreign materials, and so forth. The amount of translations has of course increased in proportion with this international business. In December, 1985, we therefore decided to introduce a machine translation system to increase the efficiency of our translation work.

We introduced a Japanese-English machine translation system (Fujitsu's ATLAS II) since our Japanese to English translation accounted for 70% of the total. After evaluating its adaptability and upgrading the system, we began testing it by translating automobile service manuals and service training manuals, only 40% of the translations were evaluated as good or correctable; however, we concluded that we could not use the system as it was for actual work. Therefore, we held a joint project with Fujitsu to find its weak points. We used manuals to tune the system's Japanese-analysis grammars, semantic processing functions, dictionaries, etc.

As a result, the quality of the translation has been improved to around 80% correctness at present. The following are some of the points to be considered when introducing a machine translation system.

(1) Selecting an area suitable for a machine translation system.

(2) Precise tuning of the system to correspond to applied fields.

(3) Systematic maintenance of dictionaries and establishment of a control system.

(4) Standardization and regulation of document writing and construction of a preediting processing system.

(5) Adjustment and integration with existing word processing systems.

(6) Implementation of a training program and establishment of a system to promote the machine translation system among the concerned departments.

Finally, we plan to expand its field of application from 1989, as well as integrate word processing systems in the future.