## **5 • 1 Practical Experience of Machine Translation Systems**

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It is reasonable to say that machine translation systems are maturing into a commercially viable product. Through a practical application of the machine translation system, it is possible to acquire practical expertise in a step-by-step manner. This experience can provide valuable data for building easier-to-use systems.

Mr. Saeki from Mazda explained his experience in the translation of Japanese-to-English automobile manuals. He remarked that the improvement of system capabilities in respect to grammar, syntax and dictionaries (for the exclusive application to manuals, etc.) should greatly improve the quality of the translation. He emphasized the importance of pre-editing and dictionary maintenance. Mazda is planning to utilize the machine translation system as one of the subsystems of the Total Document Processing System.

Mr. Oshio from JAPIO offered his experience in applying the machine translation system to the English translation of Japanese patent abstracts. He said that the demand for the machine translation system is growing. This growth is being fueled by a massive increase in the number of patent applications that are being filed and by the need for prompt dissemination of the patent information.

He called the audience's attention to the common traits of Japanese patent papers; the omitting and/or leaving out of requisite expressions (words, phrases, etc.) in the text. Mr. Oshio also pointed out the need for expanding conventional dictionaries to include terms from specialized fields. In addition, he felt that be-

cause conventional dictionaries are inadequate, preediting is essential.

Mr. Yamaoka from ISS said that the introduction of the TAURAS system offered an advantage; translation in uniform, consistent terms. He also pointed out the necessity of using uniform terms for each field. He added that such glossaries can be used to assist professional translators. Mr. Yamaoka felt that this program should be improved through close international cooperation.

Mr. Arai from JCS said in effect that, in order to develop any advanced machine translation system, the cooperation of organizations like JCS — being both a user and system developer — is necessary.

Mr. Akiyama from Arthur Anderson & Co. explained that his company has been involved in an everyday operation using the SYSTRAN system for Japanese-to-English translation. He found that the system can be a great help in facilitating consistent translations using uniform terminology. For the moment, however, the problem is the high cost of preediting. He is convinced, however, that the system can be further refined in the near future.

Mr. Shah from Compulex reported, based on his experience translating scientific and technological documents using the METAL system, that faster, more uniform, and cost-efficient translations could be realized. A partial modification of the system, however, is necessary to adapt it to the specific area of translation.