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Expectations for Machine Translation

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“Translating languages with computer” – machine translation is one of our great dreams in computer application. And this dream is actually becoming a reality. In recent years, technological progress in the area of computers has been remarkable in terms of hardware, which is focused on semiconductors, and software, which makes optimal use of hardware. Large-scale, high-speed calculation has now become possible. Not only has superfast processing speed, but the use of natural language has become possible with advances in knowledge processing research — the so-called artificial intelligence. As the technical foundation of information processing becomes solidified, machine translation has become real, and its practicality is being further enhanced.

Despite the growing exchange of industrial and technical information between countries as economic activity globalizes, the number of translators remains inadequate worldwide, and the demand is increasing for machine translation to fill this vacuum. To satisfy this need, the commercialization of machine translation systems has proceeded swiftly during the past several years.

In light of the future of global society, it will become all the more important to deepen understanding among nations and to establish intimate relations. Machine translation, which aids in resolving the language barrier, has great significance, therefore, as a major contributor to industrial, cultural and information exchange. In fact, the development of a machine translation system between Japanese and the languages of four neighboring Asian nations has commenced as a joint research project, and expectations are high for the success of the project vis-a-vis the need for deeper, friendlier ties.

It was against this backdrop that the Machine Translation Summit was held. The summit assembled researchers and engineers from universities, laboratories, computer makers, and users from around the world — as well as government officials and other persons involved in the area of machine translation. Sharing opinions and information on the current state of research, the application of commercial systems, and government policies was extremely useful. Accordingly, I believe that the understanding of machine translation and its future potential has been reaffirmed at this conference.

The history of machine translation has not been without problems. It can be said in fact that the present foundation was built while fending off voices of doubt on machine translation's practical use. In this sense, the current state of use in commercial systems must be assessed accurately as the systems spread, and the future outlook must be examined.

Information processing technology will undoubtedly make spectacular progress in the future. On the other hand, it is also understood that machine translation is not almighty but is valuable for practical application. Therefore, it is with great interest that we watch to see what technical progress machine translation systems will achieve and in what areas they will be applied.

I have great hopes that machine translation will make great advances consequent to the Machine Translation Summit, and will offer enormous contributions to international society.