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Computer Aided Translation System and Computerized Dictionary
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We, I.S.S. Inc., have been engaged in language services including translation services for more than 22 years as one of the leading companies in Japan in this field. Our customers include subsidiaries and affiliated companies of foreign computer manufacturers, telecommunication equipment manufacturers, securities companies, software companies, etc. In order to penetrate the Japanese market, they require the highest possible quality of translation from English onto Japanese for their sales materials, manuals, catalogues and so on.

In order to meet such requirements, we have introduced a computer aided translation system developed by Toshiba, in June, 1986. Since then, we have been utilizing and improving this system to assist translation activities conducted by experienced and professional translators, mainly for the following purposes:

First of all, we are utilizing this system to achieve standardization and unification of terminology. In most cases, an English text is written according to the "one word one meaning" principle, and requires standardization of terminology in a translated Japanese text. Furthermore, we usually organize a task force, or translation team, consisting of one supervisor and 3 to 10 translators for each job, so that we can afford the best services in terms of quality and delivery term. In such arrangements, standardization of terminology within this team is a "Must". When a text is more than 500 pages in volume, it is impractical to achieve such standardization manually. We believe that this kind of job should be performed by a computer.

Secondly, we are utilizing this system in order to customize terminology. Customization of dictionaries is required, for each customer has his/her own terminology. For example, "command" would be "コマンド (komando)" for one customer, "指令 (shirei)" for another customer, etc.

For this purpose, we have improved the system to incorporate "underline functions", which selects, underlines and specifies Japanese equivalence for, the terms included in our dedicated dictionaries.

In our opinion, translation between two languages having different grammatical structures, such as English and Japanese, is one of the most difficult and most intensive task for human intelligence. In order to translate English documents into Japanese, you have to have full knowledge concerning the English language. In addition to this, you should acquire a skill to write Japanese, a difficult task which very few people are able to achieve even after a long years' intensive training. Furthermore, if you haven't had working knowledge concerning the contents of the documents you want to translate, you cannot translate anything. This is the reason why we have to rely on a very few professional translators and develop some kind of computer system to assist them in order to improve productivity.

To this end, we have to improve the system to meet further requirements of professional translators. At the same time, we have to enhance our computerized dictionary both in its quality and quantity. A dictionary is, we believe, an "infrastructure" for translation. Without a road as an infrastructure, all vehicles would be useless. Without water supply as an infrastructure, the most sophisticated hotels in the world would not be in use. It is said that a computerized dictionary for practical use should include at least 10 million terms, each having an authorized Japanese equivalence. We do not think that any private company can edit such a dictionary. Rather, we believe that such a dictionary should be compiled under an international, or at least, national initiative.