MACHINE TRANSLATION SUMMIT II
Opening Address
C. Rohrer, Conference Chairman

Herzlich willkommen in München! Welcome to Munich! Welcome to MT Summit II! A: conference chairman I am glad and relieved that so many have responded to our invitation. We are more than 250 participants from all over the world. Thank you for coming! Please do participate actively in the conference in order to make it a success.

What is the aim of the second MT Summit? Like the first MT Summit in Hakone, Japan, this conference brings together users, research and development experts and government policy makers in order to promote practical MT systems.
Why do we need MT? A global economy presupposes worldwide circulation of information. This flow of information is hampered by the language barrier. The information, however, must be available in the national language of the user. Therefore it has to be translated. The demand for translation is very high. In western Europe alone more than 150 million pages were translated last year. There are not enough qualified translators, the costs are enormous. Consequently, MT is the only solution. The use of one language, like English, as a world language is ruled out because we must preserve the linguistic and cultural identity of our partners. We don't want to reduce our national languages to the role of dialects, limited to folkloristic purposes.
As I said, the first MT Summit was convened in Japan. This was no accident. Japan has made the greatest effort to develop practical MT systems. Fifteen private companies have developed research prototypes and/or commercial systems. In addition there are projects sponsored by the eminent and the very ambitious attempt to translate even telephone conversations automatically (ATR Interpreting Telephony Research Institute in Kyoto).
We had many applications from Japan. Unfortunately we could not provide time slots for the presentation of all the systems. Therefore several systems are only present at the exhibition. In comparison with Japan, Europe invests much less in MT. The EC is funding one big project but the overall amount spent in Europe is far below the Japanese figures. Especially computer makers in Europe and in the USA show far less enthusiasm than their Japanese competitors. This is, of course, reflected in the programme of our meeting and in the accompanying exhibition.

The emphasis of this conference is on practical MT. It is not a conference where computational linguists and computer scientists discuss special problems in technical jargon. We have three sessions where operational MT systems are presented. Furthermore we have a panel on practical experience in the application of MT systems. At this panel you can ask questions like what results have been achieved so far? Where and how can MT systems be used? Why don't more companies use MT systems? Have these systems been introduced prematurely? Please don't hesitate to ask questions at the panels! We need your active participation at this conference and in the future.

Besides operational systems there will be presentations of systems under development. We intend to give you a global view and have included systems from Europe, China, Japan and America. Of special interest are the multilingual projects: EUROTRA, the project of the European Community which should lead to a system translating between the nine languages of the EC., and ODA, a project of an MT system for Japan and its neighbouring countries. ODA intends to translate between Chinese, Indonesian, Malaysian, Thai and Japanese. In the panel on new directions in MT systems we will try to look a bit into the future. We use natural language for representing, storing and processing information. If one really believes that the layman, the casual user, will be able, one day, to interact naturally with the computer, then natural language is the optimal instrument. MT is only one application in the area of Human-Computer-Interaction, but it is one of the most difficult and challenging certainly. Research on MT can lay the basis for future high-level knowledge and information processing.

Research on MT is very expensive. Therefore we have to find ways to share the research and development costs in the precompetitive phase. To give one example: every MT system which translates from German into another language will need an electronic dictionary of German. Why don't we pool our resources and develop a common German machine-readable dictionary? Or if we think in terms of Europe '92, why don't we share the costs of electronic dictionaries for the languages of the European Community? We must cooperate. Or, to quote La Rochefoucauld, the famous French philosopher and moralist of the 17th century: "It would foolish to try to be smart alone". Which form such a cooperation should take is one topics of the panel on governmental views of MT.
The political decision makers, however, should not only discuss administrative measures. One of the main reasons why MT is not more advanced and not used more widely lies in our educational system. The study of language at the universities and at the school for interpreters is part of the humanities. In the humanities computers are still very often rejected on ideological grounds. When they are used, they have a purely instrumental function, they don't serve as a tool for creative research.
A few weeks ago the Wissenschaftsrat, the highest body which advises the German Federal Government on questions of university education, recommended that every university student (irrespective of what he studies) should take a four-hour semester course in computer science. I don't know of any German university which already fulfills this requirement. A translator certainly needs more than a four-hour course, but at the moment he does not even get that. In addition all students must have access to adequate computers. The more a user of an MT system knows about language, computers and computational linguistics, the more he can profit by the system. Most potential users today have an unrealistic picture of what a computer can do with natural language.

Another angle from which we have to approach MT is technical writing. MT is not for poetry or fiction. - Syntactically and semantically political speeches also fall under fiction. - MT is for technical texts. Now who writes technical texts? Where do you learn to write good technical texts? The better a text is written, the easier it is to translate, for human translators as well as for machines. Two steps are necessary. On the one hand, courses on technical writing should be established at university level, preferably at technical universities where the future technical writer can at the same time study the subject he will write about later. On the other hand, more research is necessary on technical language and sublanguages in general. How can one produce texts which do not contain ambiguities, or at least only very few ambiguities? Is it necessary to restrict the number of syntactic constructions and the words which can be used in order to avoid ambiguities? Can we make MT fully automatic by controlling the input and still produce texts which don't bore the people for whom they are written? For me these are fascinating questions? Why shouldn't they also fascinate some students and professors of German, especially if the student finds a job afterwards?

At the beginning of our talk we said that a global society, a world society, needs a free flow of information and that it is translation which makes this flow of information possible. Johann Wolfgang von Goethe, a Weltbürger, a citizen of the world, par excellence clearly recognized this fundamental task of translation when he wrote:
"Denn was man auch von der Unzulänglichkeit des Übersetzens sagen mag, so ist und bleibt es doch eines der wichtigsten und würdigsten Geschäfte in dem allgemeinen Weltverkehr". ("Kunst und Altertum", Artemis, Gedenkausgabe, Band 14, S. 932). Translated literally: Whatever one may say about the shortcomings of translation, it is and remains one of the most important and respected occupations in world communication, trade and traffic. (Following Herder, Goethe uses 'Verkehr' in the sense of communication, trade and traffic).

I hope that MT Summit II will succeed in promoting translation in general and machine translation in particular.