# COLING 80

第8回 計算言語学国際会議

**Proceedings of**
**The 8th International Conference on**
**Computational Linguistics**

**Sept. 30-Oct. 4, 1980, Tokyo**

The proceedings was printed with the partial assistance of a "Grant from the Commemorative Association for the Japan World Exposition."

# MESSAGE FROM HONORARY PRESIDENT OF COLING 80

Representing the Organizing Committee of the COLING 80, I would like to express our heartiest welcome to all of you. As Japan is an island country in the Orient, and is located far from western countries, we have many exotic cultural aspects for everyone of you to enjoy. Our language is one of them, and I would like to explain a little bit about our language.

In ancient Japan people had their language (they called it Yamato-kotoba), but had no characters. When they learned Chinese characters around the sixth century, they began to write by utilizing Chinese characters in two ways:

1) For ideograms they borrowed Chinese characters of equivalent meaning but read the characters in their own ways.
2) For about fifty phonetic signs they invented two kinds of Kana-characters.
   (a) Kata-kana: each kana is derived from an element of a corresponding Chinese character, (the pronunciation of it is needed for Japanese language).
   (b) Hira-kana: each kana is a result of simplification of a corresponding Chinese character written in a very cursive hand.

Today, Kata-kana is ordinarily used for names and words of Western origin, and Hira-kana for everything else that is written phonetically. Nowadays we use about two thousand ideographic characters and about one hundred Kana characters in our daily life. Consequently if we want to process our texts by digital computers, our first problem is the choice of input/output devices for manipulating such many characters. In this preprint you will find many papers from Japanese colleagues that relate to this problem. And you will have opportunities to see such devices during your stay in Japan.

I earnestly hope that you will find the conference both intellectually profitable and personally pleasurable. I encourage you to stay in Japan as long as possible to enjoy the autumn season which is the best in the entire year.

Hiroshi Wada
Honorary President
of COLING 80

## MESSAGE FROM ICCL CHAIRMAN

Ladies and Gentlemen, dear colleagues
in Computational Linguistics

The International Committee for Computational Linguistics is delighted to present the 8th Conference in Tokyo.
Since 1965, year of the foundation of ICCL and the first COLING conference in New-York, the interest for the field has been increasing. After seven meetings, held in North-America and in Europe, COLING-80 takes place for the first time in Asia. It is a happy event to meet in Tokyo!

For those who are regular participants of COLING conferences, it will be a good opportunity to have a more detailed knowledge of what is going on in Japan and Far East countries. It will also be an occasion for the numerous Japanese scientists, of whom only a few could attend the previous meetings, to have fruitful exchanges with their Western colleagues

After a few years of reflection and discussion about the proper content and the relevant features of what is Computational Linguistics, a general agreement came out for a broad area dealing with "natural languages and computers". The topic is both wide and yet specialized enough to find its own originality.

It is not a juxtaposition on linguists on one hand nor computer scientists or mathematicians on the other hand. Obviously, the computer is a tool. However, it is a tool with which we have to communicate by means of languages; it is also a tool by means of which we can simulate some intelligent behaviour. So, the use of natural languages to communicate with computers, and, beyond this scope, the ways of processing natural languages by computers were the attractive poles of Computational Linguistics

Many papers included in these COLING-80 proceedings show practical experiments both with written and spoken languages Nevertheless, the different aspects of Computational Linguistics could not progress in an efficient way, without deep insights and theoretical researches in linguistics, in computability, in logics and different models of representation as well as in software or hardware systems. These topics are also present in these proceedings.

There were so many submitted papers of high quality that the task of the Program Committee was very difficult. It was impossible to accept all of them. The unfortunate authors will be welcome and their cooperation will be appreciated during discussions.

It is also a very long, patient an difficult task to organize such a conferena. On behalf on the ICCL, I would like to convey the gratitude of all participants to our hosts for this very successful COLING.

Bernard Vanquois
Chairman of ICCL

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