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Introduction

This issue constitutes the twenty-fifth annual report of our Research Institute. During the period covered by this issue, Dr. Satoshi Horiguchi moved to the Metropolitan Neurological Hospital, and Dr. Kiyoshi Ohshima filled the same position until January, 1991, at which time he left for research at Haskins Laboratories, New Haven. In addition, Dr. Kohichi Tsunoda moved to the Department of Otorhinolaryngology, Tokyo University Hospital, after his return from Haskins Laboratories.

In November 1990, the International Conference on Spoken Language Processing (ICSLP) was held in Kobe, and many of our Institute staff actively participated at the Conference as speakers and as members of the Organizing Committees. To our great pleasure, we were able to welcome a good number of scientists to our Institute after the Conference.

As in past years, several distinguished scholars honored us this year by their visits for lectures and for joint research projects. Among these, Professor William Hardcastle from the University of Reading, England, gave us a lecture on his recent work and Dr. Piere Halle stayed with us for further joint studies on children's speech and Chinese tone.

As reported in this issue, the research progress at our Institute during the past year has been satisfactory. We have acquired new facilities for image processing, and we expect further progress in our projects. The research results reported in this issue are mostly preliminary form to facilitate the exchange of information and cooperative technical discussions with other research groups around the world.

Our research projects are principally supported by Grants-in-Aid for Scientific Research, from the Ministry of Education, Science and Culture, including Grants-in-Aid for Scientific Research Priority Areas (No. 02224104) and others (No. 01440071, No. 02304048, No. 02557065 and No. 02680019).

Hajime Hirose,
Director

PERSONNEL

(April 1990 - March 1991)

Professor Emeritus:

Masayuki Sawashima (D.M.Sc.)

Director: Hajime Hirose

Research Staff:

Hajime Hirose (D.M.Sc.) Professor of Speech Pathology

Shigeru Kiritani (D.M.Sc.) Professor of Speech Science

Seiji Niimi (D.M.Sc.) Professor of Speech Physiology

Satoshi Imaizumi (D.Eng.) Associate Professor of Speech Science

Yohko Fukusako (D.M.Sc.) Associate Professor of Speech Pathology

Kenji Itoh (D.Eng.) Research Associate

Sotaro Sekimoto (B.Eng.) Research Assistant

Kiyoshi Ohshima (M.D.) Research Assistant (On leave for research work at Haskins Laboratories, U.S.A. Jan.-)

Graduate Students:

Masanobu Kumada (M.D.)

Yoshiaki Murasawa (B.L.)

Yan Qun (B.L.)

Akiko Yamada-Hayashi (M.A.) (-Nov.)

Special Students:

Atsushi Matsunaga (M.D.)

Meijin Nakayama (M.D.)

Haruhito Saida (M.D.) (Oct.-)

Junichi Shimada (M.D.)

Akio Soejima (M.A.)

Masako Tateishi (B.L.)

Yohko Watanabe (B.A.) (Apr.-)

Hiroya Yamagichi (D.M.Sc.)

Mana Yamori (B.L.)

Shigeru Yamori (M.D.)

Guest Researchers:

Pierre Hallé (Ph.D.) Laboratoire de Psychologie Experimentale Université Paris V.

William Hardcastle (Ph.D.) Professor of Speech Sciences,

Department of Linguistic Science, University of Reading
Visiting Professor (Apr.)

Fiona Gibbon, Research Fellow, Department of Linguistic
Science, University of Reading (Apr.)

John A. Bisazza (Ph.D.) Assistant Professor, Department of
Literature, Meijigakuin University

Kih-Wan Hong (M.D.) Assistant Professor, Department of
Otolaryngology, Jeonbuk National University (Jan.-Mar.)

Hyum-G: Kim (Ph.D.) Assistant Professor, Department of
French Language and Literatur, Jeonbuk National University
(Dec.-Feb.)

Technical Staff:

Hiroshi Imagawa (B.Eng.)

Naokazu Kubo (part time)

Secretaries:

Miss Kikuko Yamakoshi

Miss Noriko Tsunoda (part time)

Miss Hiroko Yamane (part time)

Mrs. Yumiko Basaki (part time)(-Jun.)

Mrs. Mikiko Murakami(part time)(Apr.-)

Miss Sayo Nagai(part time)(Jun.-)

Cooperative Groups:

University of Tokyo, Faculty of Medicine,
Department of Otolaryngology, Voice and Speech Group.

University of Tokyo, Faculty of Engineering,

Department of Electrical Engineering.

Kogakuin University,

Department of Electronic Engineering.

Kitasato University, School of Medicine,

Department of Physiology.

Department of Otolaryngology.

University of Electro-Communications,

Department of Computer Science and
Information Mathematics.

Waseda University,

School of Science and Engineering.

Tokyo University of Foreign Studies,

Institute for the Study of Languages and Cultures of Asia
and Africa.

University of Tsukuba,

Institute of Human Sciences.
National Rehabilitation Center for the Disabled,
Department of Speech and Hearing Disorders, and of
Otolaryngology.
Tokyo Metropolitan Institute of Gerontology.
Department of Rehabilitation Medicine.
Section of Communication Research.
Tokyo Metropolitan Geriatric Hospital.
Department of Speech Pathology.
Osaka Shoin Women's College.
National Language Research Institute.
Center for Teaching of Japanese as a Foreign Language.
Tokyo Senbai Hospital,
Department of Otolaryngology.
Advanced Telecommunication Research Institute International