INTRODUCTION

This issue, the 28th Annual Bulletin from our Institute, presents the results of our research projects accomplished during the period of April 1993-May 1994. Many of the projects were related to the special group research projects supported by the following Grants-in-Aid for Scientific Research from the Ministry of Science, Culture and Education, Japan.

"Ontogeny and Philogeny of Cognition and Language"

"Research on Understanding and Generating Dialogue by Integrated Processing of Speech, Language and Concepts"

"Kansei Information Processing"

In June 1993, Prof. Morihiro Sugishita became the head of our Cognitive Neuroscience Section and several new research projects were started, including the following

"Neural Basis of Language and Cognition"

"Evaluation and Therapy of Language and Cognitive Disorders"

From this issue, we introduce a slight change in the format of our Annual Bulletin. That is, in order to provide more comprehensive information on the activities of our institute, we have decided to include abstracts of our original contributions published in the journals during the past one year. We hope this format will be more informative to readers of our Annual Bulletin.

Speech Science Section Head
Speech Physiology Section Head
Cognitive Neuroscience Section Head

Prof. Shigeru Kiritani Prof. Seiji Niimi Prof. Morihiro Sugishita

CONTENTS

Introduction	i
Contents	ii
Personnel	iv
Recent Publications	1
Progress Reports	25
Vocal Cord Vibrations Associated with Involuntary Voice Changes in Certain Pathological Cases S. Kiritani, S. Niimi, H. Imagawa and H. Hirose	27
Functions of Tongue-Related Muscles during Production of the Five Japanese Vowels	33
Megnetoencephalographic Components Correlated to Auditory Short-term Memory during Pitch and Phoneme Discrimination K. Mori, S. Imaizumi, S. Kiritani, K. Miyagishima and M. Yumoto	41
Test of Vocal Controllability with Increasing Pitch and Intensity	45
GRBAS Evaluation of Running Speech and Sustained Phonations T. Sakata, N. Kubota, H. Yonekawa, S. Imaizumi and S. Niimi	51
Dynamic Programming Matching Clusters Contact Calls into a Pattern Similar to that of Budgerigars' Behavioral Discrimination K. Mori, K. Ito and S. Iwasaki	57

Listener-adaptive Characteristics in Dialogue:	59
Effects of Temporal Adjustments on Emotional Aspects of Speech S. Imaizumi, A. Hayashi and T. Deguchi	
A Study on Production and Perception of Focus in German by Japanese Learners Ryoko Hayashi and Shigeru Kiritani	65
Cross Language Study of Perception of Dental Fricatives	
in Japanese and Russian	69

PERSONNEL

(April 1993 - March 1994)

Professor Emeritus:

Masayuki Sawashima (D.M.Sc.)

Hajime Hirose (D.M.Sc.)

Director: Shigeru Kiritani

Research Staff:

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

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

Morihiro Sugishita (D.H.Sc., D.M.Sc.) Professor of Cognitive Neuroscience

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

Kenji Itoh (D.Eng.) Research Associate

Sotaro Sekimoto (D.M.Sc.) Research Assistant

Kohichi Mori (D.M.Sc.) Research Assistant

Graduate Students:

Keiko Asano (M.A.)

Seiya Funatsu (M.Eng.)

Yoshitake Iwamoto (M.D.)

Masanobu Kumada (M.D.)

Tomoko Sakata (M.A.)

Yan Qun (M.H.Sc.)

Koichi Yoneda (B.L.)

Special Students:

Mayumi Hirozane (M.A.)

Toshiyo Isei (M.A.)

Atushi Matsunaga (M.D.)

Keisyuku Miyamoto (M.A.)

Haruhito Saida (D.M.Sc.)

Junichi Simada (M.D.)

Yohko Watanabe (M.A.)

Hiroya Yamaguchi (D.M.Sc.)

Mana Yamori (D.M.Sc.)

Shigeru Yamori (M.D.)

Visiting Researchers:

LU Bo (D.M.Sc.)

Technical Staff:

Hiroshi Imagawa (B.Eng.)

Secretaries:

Miss Kikuko Yamakoshi

Mrs. Mikiko Murakami (part time)

Miss Hiroko Yamane (part time)(-Dec.)

Miss Minobu Managi (part time)(-Sep.)

Miss Michiyo Tasaki (part time)(Oct.-)

Cooperative Groups:

University of Tokyo, Faculty of Medicine,

Department of Otolaryngology, Voice and Speech Group.

Department of Neursurgery.

Department of Neurology.

University of Tokyo, Faculty of Engineering,

Department of Electrical Engineering.

Kitasato University, School of Medicine,

Department of Physiology.

Department of Otolaryngology.

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,

Department of Radiology.

National Rehabilitation Center for the Disabled, College.

Department of Speech and Hearing Disorders, and of Otolaryngology.

Tokyo Metropolitan Institute of Gerontology,

Department of Language and Cognition.

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 Kyoto University,

The Primate Institute.

Tokyo Gakugei University, Faculty of Education,

Department of Special Education.

Research Institute for the Education of Exceptional Children.