

Mayumi Bono's CV January 22, 2015

Name: Mayumi Bono

Affiliation: Associate Professor
Digital Content and Media Sciences Research Division
National Institute of Informatics(NII), Japan.

Location: 2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo 101-8430 Office: Room 1516

Phone: +81 3-4212-2580

Fax: +81 3-4212-2534

E-mail: bono [at] nii.ac.jp

And

Associate Professor
Department of Informatics
School of Multidisciplinary Sciences
Graduate University for Advanced Studies (SOKENDAI)

Date of Birth (dd/mm/yyyy): 12/09/1977

Education:

Ph.D. Kobe University, Japan. 2005
Graduate School of Cultural Studies and Human Science.
M.A. Kobe University, Japan. 2002
Graduate School of Cultural Studies and Human Science.
First degree Doshisha Women's College of Liberal Arts, Japan. 2000

Brief Introduction:

I received my Ph.D. degree in linguistics from Kobe University in 2005. I was trained to consider how previous linguistic approaches, which focused on the form and function of language, can be applied to non-linguistic phenomena such as body movement, gaze direction, and posture. My Ph.D. project was conducted in a poster presentation setting similar to those at academic conferences. Using verbal and non-verbal information, I tried to build a communication model based on interaction between the exhibitor and visitors. After receiving my Ph.D., I accepted a position in informatics. Working at an informatics research institute, I engaged in regular and fruitful collaborative work with researchers in many other fields, including engineering, psychology, and anthropology, who were interested in human communication. Hence, I have always had diverse interests that encompass several perspectives. Currently, I have three ongoing research projects: (1) fieldwork with Deaf and DeafBlind communities based on a comparative approach to Japanese Sign Language (JSL)

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interactions that considers both tactile and spoken Japanese interactions; (2) field work on a robot-human theatre project, focusing on how a professional playwright, director, and engineer bring their own visions to the creation of conversations between humans and robots on the stage; and (3) fieldwork at a science museum in Japan, which draws on my Ph.D. thesis. We focus on the actions of the Science Communicators in the museum, exploring how they invite visitors to engage in scientific knowledge. We are trying to build a multimodal corpus of approaches for researchers who are interested in human communication, which we have been collecting in real space. All of these projects are based on communication studies, ethnography, and conversation analysis.

Research Opportunities:

My academic paths have been diverse. After the completion of my Ph.D., I was a researcher at the Advanced Telecommunications Research Institute International (ATR) from 2005 to 2006 and in the Department of Intelligence, Science and Technology, Graduate School of Informatics, Kyoto University, from 2006 to 2007. While I was a Research Fellow at the Japan Society for the Promotion of Science in the field of informatics from 2007 to 2009, I visited the Center for Language, Interaction, and Culture (CLIC) at the University of California, Los Angeles (UCLA), from 2007 to 2008 and the Department of Anthropology, University of Texas, Austin (UT Austin), as a visiting scholar from 2008 to 2009. My supervisors were Prof. Charles Goodwin at UCLA and Prof. Elizabeth Keating at UT Austin. Since 2009, I have been an assistant professor at the National Institute of Informatics (NII). I conducted an independent research project as part of the Precursory Research for Embryonic Science and Technology (PRESTO), funded by the Japan Science and Technology Agency (JST), from 2009 to 2013. Since 2014, I have been an associate professor at NII and The Graduate University of Advanced Studies (SOKENDAI). In addition to my professional employment, I have held part-time employment as follows: Teaching Assistant, Faculty of Cross-Cultural Studies, Kobe University, 2000–2001; Research Assistant, Japan Science and Technology Agency, Core Research for Evolutional Science and Technology (JST/CREST), 2000–2001; Mukogawa Women's University, 2008–2009; Aoyama Gakuin University, 2011–present; Rikkyo University, 2013–present.

Career (mm/yyyy):

09/2000 - 03/2001	Teaching Assistant, Department, Faculty of Cross-Cultural Studies, Kobe University, Japan.
09/2000 - 03/2001	Research Assistant, JST/CREST(Japan Science and Technology Agency, Core Research for Evolutional Science and Technology), Japan.
09/2002 - 03/2003	Intern Student, ATR Media Information Science Laboratories, Japan
09/2003 - 03/2005	Intern Researcher, ATR Media Information Science Laboratories, Japan
04/2005 - 03/2006	Researcher, ATR Media Information Science Laboratories, Japan
04/2006 - 03/2007	Postdoctoral Research Fellow, Graduate School of Informatics, Kyoto University, Japan
04/2007 - 03/2010	JSPS Research Fellow, Graduate School of Informatics, Kyoto University, Japan

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- 10/2007 - 03/2008 Visiting Scholar, Center for Language, Interaction, and Culture (CLIC), Mentor: Prof. Charles Goodwin, University of California (UCLA), U.S.
- 09/2008 - 03/2009 Visiting Scholar, Department of Anthropology, Mentor: Prof. Elizabeth Keating, The University of Texas at Austin, U.S.
- 04/2009 – 03/2014 Assistant Professor, Digital Content and Media Sciences Research Division, National Institute of Informatics (NII), Japan.
- 04/2009 – 03/2014 Assistant Professor, Department of Informatics, School of Multidisciplinary Sciences, Graduate University for Advanced Studies (SOKENDAI), Japan.
- 04/2014 – present Associate Professor, Digital Content and Media Sciences Research Division, National Institute of Informatics (NII), Japan.
- 04/2014– present Associate Professor, Department of Informatics, School of Multidisciplinary Sciences, Graduate University for Advanced Studies (SOKENDAI), Japan.

Awards (mm/yyyy):

- 06/2005 JSAI Incentive Award, The Japanese Society for Artificial Intelligence, Japan.
Mayumi Bono, Noriko Suzuki, Yasuhiro Katagiri, 2004,
"Identification of Conversation Participation Procedures with Ubiquitous Sensors."
- 03/2006 Tokugawa Munemasa Award, The Japanese Association of Sociolinguistics Sciences, Japan. Mayumi Bono, Yasuhiro Katagiri, 2005,
"Interactive viewpoint in face-to-face interactions: coordination of gesture, gaze and speech."
- 07/2009 Outstanding Presentation Award, The Japanese Association of Sociolinguistics Sciences, Japan. Mayumi Bono, 2009,
"Schisming in Japanese Sign Language Conversation: From a Point of View of Turn-taking and Participation Framework"
- 03/2012 Tokugawa Munemasa Award, The Japanese Association of Sociolinguistics Sciences, Japan. Mayumi Bono, 2011,
"Multimodal Analysis for Sign Language Conversation: From Two Case Studies on Three Party Conversations."
- 06/2012 JSAI Incentive Award, The Japanese Society for Artificial Intelligence, Japan.
Eiji Toyama, Yasuharu Den, Mayumi Bono, and Kazuhiro Otsuka, 2011,
"Reconsideration of Gestural Viewpoint."

Ten career-best research outputs (2005-current):

- (1) Mayumi Bono, Yasuhiro Katagiri. (2005) Taiwa komyunikeeshon ni okeru sougokouiteki shiten-jesucha siten hatuwa no kyouchou. (Interactive viewpoint in face-to-face interactions: coordination of gesture, gaze and speech). The Japanese Journal of Language in Society. Vol.7, No.2, 3-13. (Tokugawa Munemasa

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Award, The Japanese Association of Sociolinguistics Sciences, Japan.)

Statement: This paper discusses speaker viewpoints in face-to-face interaction. A new type of viewpoint, interactive viewpoint, is proposed to supplement "the descriptive viewpoint" (McNeill 1992) that captures spontaneous gestures.

- (2) Mayumi Bono (2008) *Nihongo kaiwa ni okeru gengo-higengohyougen no douteki kouzou ni kansuru kenkyuu* (Study on Temporal and Sequential structure of Verbal and Nonverbal Representation in Japanese Conversation). Hituzi Shobo. vii+191pages.

Statement: This book is based on my doctoral thesis submitted to Kobe University in 2005. It is restructured as a handbook of interaction studies and gesture studies.

- (3) Mayumi Bono, Takanashi Katsuya, and The Japanese Society for Artificial Intelligence (eds) (2009) *Taninzuu intarakushon no bunseki shuhou* (Handbook of multiparty interaction analysis). Ohmsha. viii+252 pages.

Statement: We edit this book for engineers and informatics researchers who are interested in communication studies in order to design a social robot and human interface in HRI field.

- (4) Mayumi Bono. (2011) *Shuwakaiwa ni taisuru maruchimo-daru bunseki- shuwa sanninkaiwa no futatsu no jireibunseki kara*. (Multimodal Analysis for Sign Language Conversation: From Two Case Studies on Three Party Conversations). *The Japanese Journal of Language in Society*. Vol.13, No.2, 20-31. (Tokugawa Munemasa Award, The Japanese Association of Sociolinguistics Sciences, Japan.)

Statement: This paper analyses signed conversations from the perspectives of Conversation Analysis (CA) and Multimodal Interaction Analysis.

- (5) Mayumi Bono. (2013) *Sentences and Utterances in Conversations: Similarities and Differences between Signed and Spoken Languages*. *Signed and Spoken Language Linguistics (SSLL) Festa at Minpaku 2013, Second International Symposium on Signed and Spoken Language Linguistics, Word Order and Sentence Structure in Languages*. (September 29, 2013, Minpaku, Osaka, Japan)

Statement: In this invited talk, I introduce an annotation and a transcription system I use for analysing signed utterances in interaction. I discuss similarities and differences between signed and spoken languages.

- (6) Kouhei Kikuchi, Mayumi Bono. (2013) *Sougokoui ni okeru shuwahatuwa wo kijyutu suru tameno anote-shon mojikashuhou no teian* (Proposal of New Annotation and Transcription Scheme for Signed Utterances in Interaction). *Shuwagaku kenkyuu* (Japanese Journal of Sign Language Studies), Vol.22, pp.37-63.

Statement: In order to build an annotation and a transcription systems, we applied the concept of a "gesture unit" (Kendon, 2004; McNeill, 2005) to spoken conversations and signed utterances.

- (7) Mayumi Bono, Katsuya Takanashi, and Hiroaki Ogata, and Akihiro Osaki, and Hiromi Ochiai, and Yuko Morita. (2013) *Chishikikyouyou sou intafeesu tositeno kagaku komyunikeetaa: Nihon kagaku miraikan ni okeru intarakushon bunseki* (The Role of Science Communicator as a Knowledge Creation Interface: Analyses of Human Interactions at Miraikan). *Huuman intafeesu gakkai ronbunshu* (Japanese

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Journal of Human Interface Society) Vol.15, No.4, pp.375-388.

Statement: This paper describes our activities of fieldwork on science museum such as understanding the role of science communicator (SC) in Japan.

- (8) Mayumi Bono, Hiroaki Ogata, and Katsuya.Takanashi, and Ayami Joh. (2014) The Practice of Showing 'Who I am': A Multimodal Analysis of Encounters between Science Communicators and Visitors at Science Museum. Universal Access in Human-Computer Interaction. Universal Access to Information and Knowledge Lecture Notes in Computer Science Volume 8514, pp. 650-661.

Statement: In order to understand how Science Communicators (SCs) represent 'who I am' in a museum, we conduct an ethnographic observation to focus on scenes where SCs meet visitors.

- (9) Kouhei Kikuchi and Mayumi Bono (in press) Sougokoui toshiteno shuwatsuyaku katsudo: tsuuyakusha wo kaishita jyunbankaisi no tameno kikitekakutoku tetsuzuki no bunseki. (Sign interpreting as an Interaction: An analysis on procedures of getting addressee for turn-opening mediated by sign interpreters) Ninchi kagaku (Japanese Journal of Cognitive Science Society). Vol.22, No.1.

Statement: This paper aims to clarify the role of sign interpreters as an interactional participant in the multi-lingual and multi-party settings that consists of Hearing people, Deaf people and sign interpreters.

- (10) Mayumi Bono. (in press) Robotto wa idobatakaigi ni haireruka: nichijyoukaiwa no engekiteki sousakubamen ni okeru fi-rudowa-ku (Can a Robot Join an Idobata Kaigi?: A Fieldwork on Theatrical Creation of Daily Conversation). Ninchi kagaku (Japanese Journal of Cognitive Science Society). Vol.22, No.1.

Statement: Based on a fieldwork in a human-robot theatre project, I analyse multimodality and sequential organizations in human-robot interaction.

Previous Funded Projects:

I conducted an independent research project as part of PRESTO, funded by the Japan Science and Technology Agency (JST), from 2009 to 2013, for which I received a grant of 413,080 AUD (40,000,000 JPY) over 42 months. The research aim was to understand everyday JSL conversation and examine the availability of information support and sign language interpretation in academic settings. In parallel, I was a PI of the JSL corpus project funded by the Japan Society for the Promotion of Science (JSPS), in which we tried to collect language variations of JSL in Japan. Up to this point, I have received around 877,795 AUD (85,000,000 JPY) from various Japanese funding agencies.

Contributions for End Users:

We began building a corpus for Japanese Sign Language (JSL) in April 2011, supported by the Japan Society for the Promotion of Science. The purpose of this project was to increase awareness of sign language as a distinctive language in Japan. This corpus is beneficial not only to linguistic research but also to the hearing impaired and the deaf as it helps them recognize and respect their linguistic differences and communication

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styles.

In the first stage of this project, we filmed 40 deaf subjects from May to July 2012 in two prefectures, Gunma and Nara, each of which are located around 50 to 100 km from Tokyo and Osaka, respectively. Each prefecture has one school for the deaf. We obtained age-balanced data from people 30–70 years of age in each prefecture and each age group was divided into female and male pairs. In the second stage, we filmed 32 deaf subjects from December 2014 to January 2015 in two prefectures, Nagasaki and Fukuoka. We conducted three tasks, interview, dialogue, and lexical elicitation. Each filming session took 1.5 hours including explanation of ethics and signing the letter of consent. In order to make it available to general public and interested researchers, we published the corpus on the Internet: <http://research.nii.ac.jp/jsl-corpus/en/>.