Loch Lomond Symposium on Action Anticipation

UK Scientific Lead: Dr Jonathan Delafield-Butt, University of Strathclyde

Scientific Lead from Japan: Prof. Koichi Negayama, Waseda University

Objective: To advance intersubjectivity research between Japan and the UK by advancing action anticipation as a key element in early development, currently a global focus at the cutting edge of psychological research.

Background: This symposium advanced world-leading work in intersubjectivity and action anticipation across laboratories from Japan, the UK, and Europe on the development of perceptual and motor anticipation in infancy, and its implications for early psychological development of social understanding. It explored the role of anticipation in the development of embodied, non-verbal knowledge that allows prediction of patterns of emotion and intentions in social engagement – a core tenet of social understanding. Recent advances in action research, neuroscience, and enculturation identify development of anticipation as a core phenomenon of mind requiring multidisciplinary investigation. This symposium established foundations for an inter-disciplinary, inter-cultural collaboration to advance knowledge of the development anticipation, its differences across cultures, and impact for health and learning.

Report of Event: This symposium set out to advance research on action anticipation in early development as a key element in a child's sense of agency, in learning, and in adaptation to cultural practices. It brought together select researchers from Japan and the UK in order spearhead new collaborative efforts between participants and to generate research synergy in this multidisciplinary field. The symposium was held at the Ross Priory, a beautiful estate on the shores of Loch Lomond dating back to the 17th Century and a unique University of Strathclyde conference facility. Here in the tranquillity of the Scottish Highlands and away from the distractions of a busy life, researchers from psychology, anthropology, education, medicine, and neuroscience – from across the UK, Japan, and Europe – were able to find the time and space needed to benefit from each others' disciplines and research, and to bridge cultures for a shared, cross-disciplinary understanding of this topic fundamental to human psychology. I am happy to report we did so with some success. Twenty-five participants and speakers met for two days intensive talks, with a third day given to private discussion between invited speakers to share work-in-progress and so afford opportunities for to collaborate on ongoing research interests and energies.

The symposium opened with a Japanese Scientific Lead Prof. Koichi Negayama taking account of the historical significance of hosting this symposium at Ross Priory. It was at this place 40 years ago that Prof. Colwyn Trevarthen – then a young lecturer from Harvard beginning his career in Scotland – came together for a similar symposium with colleagues to form a landmark symposium on child development, including world-leaders Profs. Bruner and Stern. Fitting the historical moment, Prof. Trevarthen opened the symposium with an overview of his 40+ years of research on action anticipation in infancy, giving a view of the child as an active, participatory agent.

The symposium proceeded with each speaker delivering a 30 minute talk, followed by 15 minutes for open discussion. Each paper was examined in depth to recognise overlaps between interests and generate cross-disciplinary fertilization. There was good resonance and

discussion on all topics. For example, Assoc. Prof. Akira Takada's research on the development of cultural anticipation of the !Xun tribe of north-central Namibia shed light on Prof. Vasu Reddy's work on enculturation of infants in early parent-infant interactions in India and the UK. The topic of cultural differences was developed further by Prof. Koichi Negayama as he presented on his research on the development of cultural differences between infant rearing patterns in Japan, United States, and the United Kingdom, including new work with symposium lead Dr. Delafield-Butt, developed from an earlier JSPS Invitation Fellowship.

Altogether, the symposium enabled development of new research collaborations and enhancement of existing collaborations between partners. Scientific Lead Negayama and Principal Applicant Delafield-Butt had the opportunity to extend their collaborative project toward a new research paper, and new collaborations between scientists not currently engaged, but whose work offered synergies was also enabled. For example, Prof. Vasudevi Reddy will visit Japan on two occasions in 2016 during which she will visit with Prof. Koichi Negayama and Assoc Prof. Akira Takada. Further, synergies between Dr. Delafield-Butt's work on early child development and Prof. Takeshita's work on comparative analysis of non-human primate and human development has led to a joint submission for a symposium at the forthcoming 31st International Congress of Psychology in Yokohama in July 2016. Moreover, Prof. Hideko Takeshita has invited Dr. Jonathan Delafield-Butt to attend a research visit to the Primate Research Institute for a comparative study of chimpanzee and human social interaction, for which we will seek JSPS support in due course.

Overall the symposium was warmly received by all participants and the unique, isolated setting of the Ross Priory in the Scottish Highlands enabled bonds to be formed between individuals. For example, Prof. Colwyn Trevarthen is now in engaged in dialogue with Dr. Naho Katori for collaboration on a joint research project that investigates the role of 'musicality' in early prematurely-born infants held within intensive neonatal care at Keio University Hospital. Further, Prof. Trevarthen is in dialogue with Assoc. Prof. Akira Takada on the social nature of child learning in Namibia, as well as with long-standing colleague Prof. Koichi Negayama on early child development in general. Prof. Negayama and his colleagues are preparing to translate the book "Communicative musicality", a landmark volume on the nature of human communication, edited by Prof. Stephen Malloch and Prof. Colwyn Trevarthen, into Japanese.

In sum, some examples of material collaboration and cooperative work to come out of this symposium are as follows:

- (1). Prof. Negayama and Dr. Delafield-Butt strengthened existing relationship and advanced collaborative research on cross-cultural comparison of Japanese and Scottish mother-infant pairs for a new joint research paper.
- (2) Prof. Hideko Takeshita and Dr. Delafield-Butt established a new collaboration on comparative analysis of chimpanzee and human mother-infant interaction to be conducted at the Primate Research Institute, and submitted a joint symposium at ICP (Yokohama, 2016).
- (3) Prof. Negayama & Assoc. Prof. Takada and Prof. Vasu Reddy strengthened their relationships and research co-operation, which will be continued in Japan on the back of two previously planned research visits for Prof. Reddy to Japan in 2016.

- (4) Prof. Negayama and Prof. Colwyn Trevarthen & Prof. David Lee -- strengthened and enhanced their relationship with new dialogue on the nature of child development and movement in social anticipation
- (5) Dr. Naho Katori and Prof. Colwyn Trevarthen established new dialogue and research cooperation on analysis of musicality in prematurely born infant health.

Altogether we consider this symposium a great success, providing both new professional relationships and enhancing existing ones. We anticipate that a future symposium might be possible in 3-5 years, but that in the short term we need to continue to engage in research with one another, and allow the next focus to emerge from this work in due course.

-Dr. Jonathan Delafield-Butt



Symposium Participants