



**Donders Institute**  
for Brain, Cognition and Behaviour



**IST2-FP6-003747**

# **Intention Understanding as Prerequisite of Joint Action Monitoring**

11 Oct 2009

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**Radboud University Nijmegen**



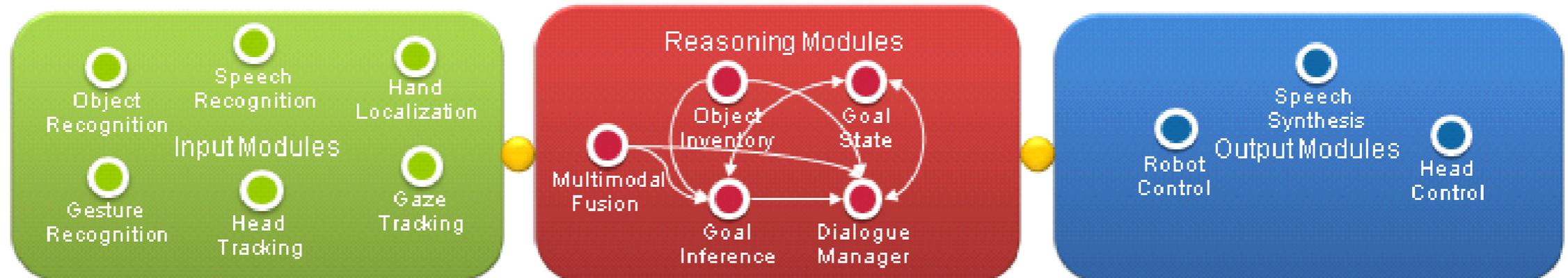


## JAST Robot System *(see: <http://www.europrojects-jast.net/> )*



1. Goal Inferencing
2. Error Monitoring

*“Role of Mirror Neuron System In Complementary Actions During Social Interaction”*

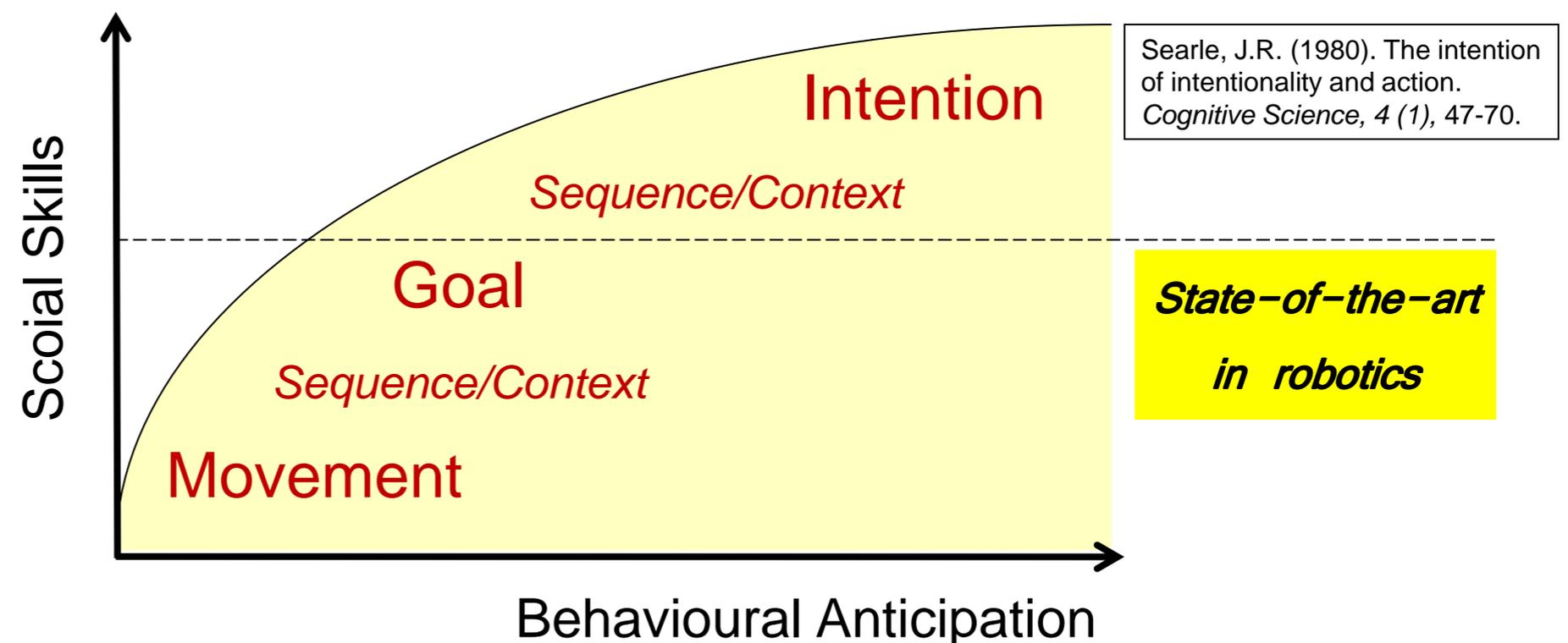


See Erlhagen et al. (2006). *Robotics and autonomous systems*, 54, 353-360.



## Scientific challenges

- Social nature of neural processes
- Learning and development
- Self/other action monitoring
- Motor intention understanding





## Grounding Cognition in Sensorimotor Coordination

### Motor Resonance and Joint Action

- Development of Motor Resonance
- Learning Shared Task Control in Joint Action
- Acquisition Motor Intention Understanding
- Repair of Intentional Errors in Joint Action





11 Oct 2009

## Meeting the challenge

- Two-day Symposium on Joint Action  
11-12 Nov 2009  
Amsterdam, NL
- *(17 Oct 2009: Registration closed)*

The poster features the NWO logo in the top left corner. A red banner at the top right contains the dates 'November 11-12, 2009' and a stylized 'd' logo. Below this, the Donders Institute logo is on the left, and the event title 'Joint Action: New Perspectives from Developmental and Cognitive Neuroscience' is centered in white text on a black background. Underneath, 'A two-day workshop' is written in white. The main content is divided into two columns for Wednesday (11 November 2009) and Thursday (12 November 2009), each listing speakers and their topics. A red box at the bottom left states 'Registration required. Participation free of charge.' and provides registration details. The bottom right identifies the venue as 'Het Trippenhuis' at the Dutch Royal Academy of Science in Amsterdam, and mentions Radboud University Nijmegen with its logo.

**NWO**

**November 11-12, 2009**

**Donders Institute**  
for brain, cognition and behaviour

**Joint Action:**  
New Perspectives from Developmental  
and Cognitive Neuroscience

**A two-day workshop**

**WEDNESDAY**  
11 november 2009

**Natalie Sebanz**  
Joint Action: A Field Survey

**Rick van Baaren**  
Social Moderators of Automatic Imitation

**Cecilia Heyes**  
From Imitation to Joint Action

**Atsushi Senju**  
Gaze Following in Early Infancy:  
Adaptation for Social Communication?

**Michael Spazio**  
Direct Gaze for Joint Action:  
Theoretical and Empirical Approaches to Gaze  
during Competitive and Prosocial Interactions

**Gyorgy Gergely**  
Why point? Mental Sharing versus Knowledge  
Seeking

**THURSDAY**  
12 november 2009

**Rainer Goebel**  
TBA

**Rafi Malach**  
Neuronal Ignitions underlying Object Recognition  
and Recall in the Human Brain

**Christian Keysers**  
The Mirror System and its Contribution to Joint  
Action

**Celia Brownell**  
Early Development of Peer Cooperation:  
Joint Action and Self-Other Understanding

**Felix Warneken**  
Collaboration in Children and Chimpanzees:  
Coordinating Behaviors and Sharing Intentions

**Harold Bekkering**  
Joint Action: The Use of Embodied and Embedded  
Information to Coordinate One's Actions With Others

**Registration required.**  
**Participation free of charge.**

Registration until October 15, 2009  
via [joint.action@donders.ru.nl](mailto:joint.action@donders.ru.nl)

"Het Trippenhuis"  
Dutch Royal Academy of Science  
Amsterdam, The Netherlands

Radboud University Nijmegen

