

A JAPANESE-GERMAN CONFERENCE

# Artificial Intelligence and the Human Cross-Cultural Perspectives on Science and Fiction

Wednesday 11 until Friday 13 May 2022

Current debates on artificial intelligence often conflate the realities of AI technologies with the fictional renditions of what they might one day become. They are said to be able to learn, make autonomous decisions or process information much faster than humans, which raises hopes and fears alike. What if these useful technologies will one day develop their own intentions that run contrary to those of humans?

The line between science and fiction is becoming increasingly blurry: what is already a fact, what is still only imagination; and is it even possible to make this clear-cut distinction? Innovation and development goals in the field of AI are inspired by popular culture, such as its portrayal in literature, comics, film or television. At the same time, images of these technologies drive discussions and set particular priorities in politics, business, journalism, religion, civil society, ethics or research. Fictions, potentials and scenarios inform a society about the hopes, risks, solutions and expectations associated with new technologies. But what is more, the discourses on AI, robots and intelligent, even sentient machines are nothing short of a mirror of the human condition: they renew fundamental questions on concepts such as consciousness, free will and autonomy or the ways we humans think, act and feel.

Imaginations about the human and technologies are far from universal, they are culturally specific. This is why a cross-cultural comparison is crucial for better understanding the relationship between AI and the human and how they are mutually constructed by uncovering those aspects that are regarded as natural, normal or given. Focusing on concepts, representations and narratives from different cultures, this conference aims to address two dimensions of comparison that help us make sense of the diverse realities of artificial intelligence and the ideas of what is human: Science and fiction, East Asia and the West.

# AGENDA

# Wednesday, 11 May 2022 · Location tbd

19:00-20:30		
19.00-20.50	Keynote Address I: Kanta Dihal	
20:30-21:30	Conference Reception	
Thursday, 12 M	ay 2022 · Location: Japanese-German Center Berli	in (JDZB)
09:00-10:00	Registration and Coffee	
10:00-10:30	Welcome Note and Introduction	
10:30-12:00	Concurrent Panels	
	Imagining Al & the Human	Robot-Human Interaction
12:00-13:30	Lunch Break	
13:30-15:00	Concurrent Panels	
	The Languages of Al	Bodies, Intimacies, Relationships
15:00-15:30	Coffee Break	
15:30-17:00	Concurrent Panels	
	Industries	Brain & Mind
17:00-17:30	Coffee Break	
17:30-19:00	Keynote Address II: Simone Natale	
19:00	Performance + Reception	
	Performance + Reception  2022 · Location: Japanese-German Center Berlin (	IDZB)
		IDZB)
Friday, 13 May	<b>2022</b> · Location: Japanese-German Center Berlin (.	IDZB)
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# Wednesday, 11 May 2022 · Location: tbd

# 19:00-20:30 Keynote Address I: How the world sees intelligent machines

Kanta Dihal (Leverhulme Centre for the Future of Intelligence, University of Cambridge)

People have been imagining intelligent machines for millennia, in ways that vary greatly across cultures. Yet as artificial intelligence begins to fulfil its potential, many of these perspectives are marginalised. In her lecture, Kanta Dihal will introduce such visions from across the globe, and what they can tell us now that AI is becoming a technological reality.

20:30 – 21:30 Conference Reception

#### Thursday, 12 May 2022 · Location: Japanese-German Center Berlin (JDZB)

9:00–10:00 Registration and Coffee

#### 10:00-10:30 Welcome Note and Introduction

Thomas Christian Bächle (HIIG, Berlin)

Julia Münch (JDZB, Berlin)

Katsumi Watanabe (Waseda University, Tokyo)

#### 10:30-12:00 **– Concurrent Panels –**

#### Imagining AI & the Human

- Christian Katzenbach, Vanessa Richter (University of Bremen), Anna Jobin, Laura Liebig, (Alexander von Humboldt Institute for Internet und Society, Berlin)
   Shaping AI – Imaginaries and Controversies of AI in Media and Policy
- Ophelia Deroy (Ludwig Maximilian University of Munich)
   'Ghosts in the machine': What shapes folk conceptions of artificial intelligence, and why should they differ?
- Simone Shu-Yeng Chung (National University of Singapore)
   Seeing through Al's eyes, vividly

# **Robot-Human Interaction**

- Eileen Roesler (Technische Universität Berlin)
   Form follows function: Challenging the effectiveness of anthropomorphism in human-robot interaction
- Friederike Eyssel (Bielefeld University)
   A social psychological perspective on social robots
- Matthias Sommer, Sabrina Tietz (Chemnitz University of Technology)
   Accounting AI: Interaction and emotional labor with (ro-)bots in algorithmic situations
- Katsumi Watanabe (Waseda University, Tokyo)
   Implicit aspects of agent interactions

12:00-13:30 Lunch Break

#### 13:30 – 15:00 – Concurrent Panels –

#### The Languages of Al

- Maurice Jones (Concordia University, Montreal)
   Intelligent machines in a fluid world: Deconstructing metaphors in Japanese AI policy
- Nicole Marion Mueller (Martin Luther University Halle-Wittenberg)
   Artificial Intelligence and the Literary Scholar Fictional oversimplification and epistemic potentials of NLP-based translation analysis with regards to Japanese and German concepts of literary (re)translation
- Rachel Hill (University College London)
   "this insatiable earth of a planet, Earth": Literacy in Al poetics

# **Bodies, Intimacies, Relationships**

- Elena Knox (Waseda University, Tokyo)
   Funeral rites for obsolete robots in the temple of technology
- Hiromi Tanaka (Meiji University, Tokyo/University of Amsterdam), Michelle H. S. Ho (National University of Singapore)
   Romancing AI: Gender and new digital intimacies in contemporary Japan
- Désirée Kriesch (University of Klagenfurt/University of Innsbruck)
   Disembodied agency: Meanings and functions ascribed to AI voices in contemporary film

15:00-15:30 Coffee Break

#### 15:30-17:00 **– Concurrent Panels –**

#### **Industries**

- Colin Porlezza (Università della Svizzera italiana, Lugano), Laura Pranteddu (Università della Svizzera italiana, Lugano)
  - 'Robots in the Newsroom': A cross-cultural comparison of the implications of Al-driven technology in journalism
- Ulrike Schaede (University of California San Diego), Carsten Schaede (Misumi Europe GmbH, Frankfurt am Main)
  - Perception and reality of AI in industrial production: Differences between Germany, Japan and the U.S. in factory automation and the future of work
- Tomoki Sakata (Otto-Friedrich-University Bamberg)
   Philosophical reflection on ideas of smart city: Human-centered Europe and nature-centered Japan

# **Brain & Mind**

- Tetsuya Ogata (Waseda University, Tokyo)
   Neurorobotics model studies based on the policy of prediction error minimization
- Angélica Cabrera Torrecilla (Universidad Nacional Autónoma de México, Mexico City)
   The psychopolitics of brain-computer interfaces: a critical study from a fictional text
- Dagmar Gesmann-Nuissl, Stefanie Meyer, Robert Ziola (Chemnitz University of Technology)
   I act (consciously), therefore I am.

17:00-17:30 Coffee Break

#### 17:30–19:00 Keynote Address II: Projecting life onto machines

Simone Natale (University of Turin; Loughborough University)

# 19:00 **Performance + Reception**

Laser Mice - So Kanno (Tokyo/Berlin) & DJ Don't DJ

# Friday, 13 May 2022 · Location: Japanese-German Center Berlin (JDZB)

8:45–9:15 Registration and Coffee

#### 9:15 – 10:45 — **Concurrent Panels** —

#### Asian AI vs. European AI? Methodological Challenges of Cross-Cultural Research

- Jing Zeng (University of Zurich), Elena Knox (Waseda University, Tokyo), Colin Porlezza (Università della Svizzera italiana, Lugano), Kanta Dihal (University of Cambridge)
   Expert panel incl. short methodological introduction
- Discussion

# **Smart, Caring and Sensitive Environments**

- Celia Spoden (German Institute for Japanese Studies, Tokyo)
   Cybernetic avatars and the vision of an inclusive society
- Richard Paluch (University of Siegen)
   Robotic systems for the aging society
- Marie-Julie Catoir-Brisson, Julien Pierre (Audencia Business School, Nantes)
   Who will populate Sensitive Home? Opening new cultural trajectories in the design of emotional interactions: Analysis of an AI bestiary

#### 10:45-11:15 Coffee Break

#### 11:15-12:45 **– Concurrent Panels –**

# **Futures & Fictions**

- Hirotaka Osawa (Keio University, Tokyo)
   How does science fiction influence AI research?
- Michel Hohendanner (Munich University of Applied Sciences), Chiara Ullstein (Technical University of Munich), Yosuke Buchmeier (Ludwig Maximilian University of Munich)
   Cross-cultural perspectives on technology-driven future societies through the lens of collaborative speculative design
- Jiré Emine Gözen (University of Europe for Applied Sciences, Hamburg)
   Visions of the future in cyberpunk literature and their impact on the present: Neuralink's interface, the Matrix and Elon Musk

# Robots and the human: Cross-cultural perspectives

- Jurgis Karpus (Ludwig Maximilian University of Munich)
   Do people in Japan cooperate more with artificial agents? Lessons from game theory and psychology
- K.-Ulrike Nennstiel (Hokusei Gakuen University, Sapporo)
   The picture of "the human" as reflected in academic research on social robots: A cross-cultural analysis
- Hironori Matsuzaki (Carl von Ossietzky University of Oldenburg)
   Artificial humans and the borders of the social: Two different modes of robotics Europe and Japan

12:45-14:00 Lunch Break

#### 14:00–15:15 Workshops and Networking Activities

15:15-15:45 Coffee break

# 15:45-16:45 Keynote address III: How to build developing minds

Yukie Nagai (Cognitive Developmental Robotics Lab (Nagai Lab), The University of Tokyo)

A grand challenge in the design of artificial intelligence (AI) is to endow it with the developmental capacity humans have. Human development is open-ended. Humans acquire multiple cognitive abilities continuously whereas AI systems are often designed for specific tasks. Humans also exhibit individual diversity. Unlike stereotypical AI, humans perceive and interact with the world in different ways, which allows them to help and cooperate with each other.

The goals of Cognitive Developmental Robotics include to elucidate the underlying neural mechanisms of human development and to build artificial developing minds. The presentation will hypothesize that the neuroscience theory called predictive coding provides a unified account for cognitive development and investigate the potentials of the theory using neural networks. It will show how the continuity and diversity in human development can be replicated in artificial developing minds.

# 16:45 – 17:45 Closing Discussion

18:00 Conference Closing & Snacks

#### ONLINE PROGRAMME

To see the most recent version of the conference programme, please visit hiiq.de/events/ai21 (Japanese version).

#### REGISTRATION

We kindly ask you to register for the conference via the website of the Japanese-German Center Berlin.

**GO TO REGISTRATION** 

#### ORGANISERS AND PARTNERS

The conference is jointly organised by Alexander von Humboldt Institute for Internet and Society (HIIG), Berlin, Japanese-German Center Berlin (JDZB) and Waseda University, Tokyo. The event is kindly supported by Deutsche Forschungsgemeinschaft (DFG).







