

#### WELCOME

# The ShanghAl Lectures by the University of Zurich An experiment in global teaching

Today from the University of Zurich Switzerland

27 September 2012

欢迎您参与 "来自上海的人工智能系列讲座"

#### Participate as a company

Be a sponsor, a supporter or take on an active role.

Financial donations and other support such as infrastructure, hardware, and software, are highly welcomed while mutual benefit is aimed at. For each party, a certain participation and/or collaboration mode is elaborated.

#### Examples:

- Reserve a timeslot where you can present your company to a world-wide audience, pose interesting technical challenges and provide insight into real-world applications and opportunities.
- Take over a certain section of the lecture on robotics or intelligent software development presenting real-world applications and providing the research community with insight into private industry.
- Share your ideas with a world-wide community.

#### Your next step:

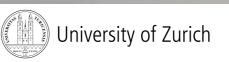
If you are interested in participating, send us mail or call us directly:

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#### Project updates

You can always find the latest information about the project and download the most recent version of this brochure at <a href="http://shanghailectures.org/">http://shanghailectures.org/</a>
This is version 2008-08-27.







An experiment in mixed-reality global teaching, intercultural collaboration and community building

The ShanghAl Lectures on natural and artificial intelligence will be broadcast by videoconference from Jiao Tong University in Shanghai together with universities around the globe, complemented by virtual 3D collaborative environments and other community-building activities to promote cross-cultural interaction and cooperation among the participants.

Fall semester 2009



## Today's program

06:00 sites begin connecting (chat, screensharing, videoconference)

06:55 all sites are ready

07:00 START - Rolf: Welcome, content overview, goals, guest speaker preview

07:10 Nathan: Project overview, history, website, exercises,

competitions: NAO and EmbedIT

07:20 Pascal Kaufmann: Guest lecture on Roboy

07:55 break

08:10 Rolf: Lecture 1: Intelligence -- an Eternal Conundrum.









#### Goals

- Education and knowledge for anyone on the planet
- Latest technology for knowledge transfer and community building
- Spreading idea of "embodied intelligence" —> new way of thinking
- Research platform: studying collaboration intercultural
- Strengthening ties between universities
- informed opinion on media reports

















#### **Expected results**

- interactions with important universities from around the world
- new collaborations
- global exchange with renowned researchers from different backgrounds in the field of intelligence research
- new view of intelligence, ourselves, world









## Natural and artificial intelligence

- suited for wide interdisciplinary audience
- no specific prior training required
- novel ideas
- broad interest in public at large









#### Table of contents

- Intelligence an eternal conundrum
- Cognition as computation successes and failures
- Towards a theory of intelligence
- Design principles for intelligent systems (II parts)
- Ontogenetic development: from movement to cognition building brains for bodies: ANNs
- Evolution cognition from scratch
- Collective intelligence cognition from interaction
- Where is human memory?
- How the body shapes the way we think summary, conclusions, outlook









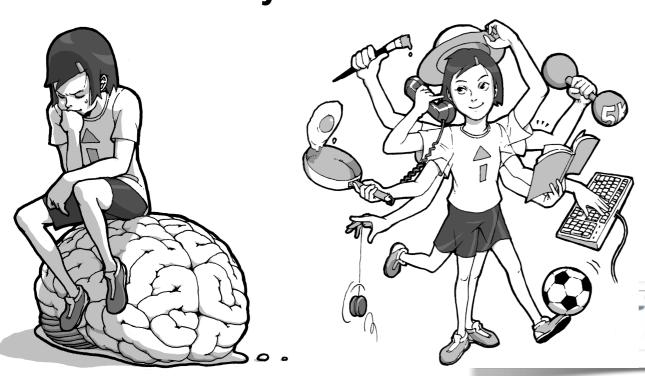
#### **Book for class**

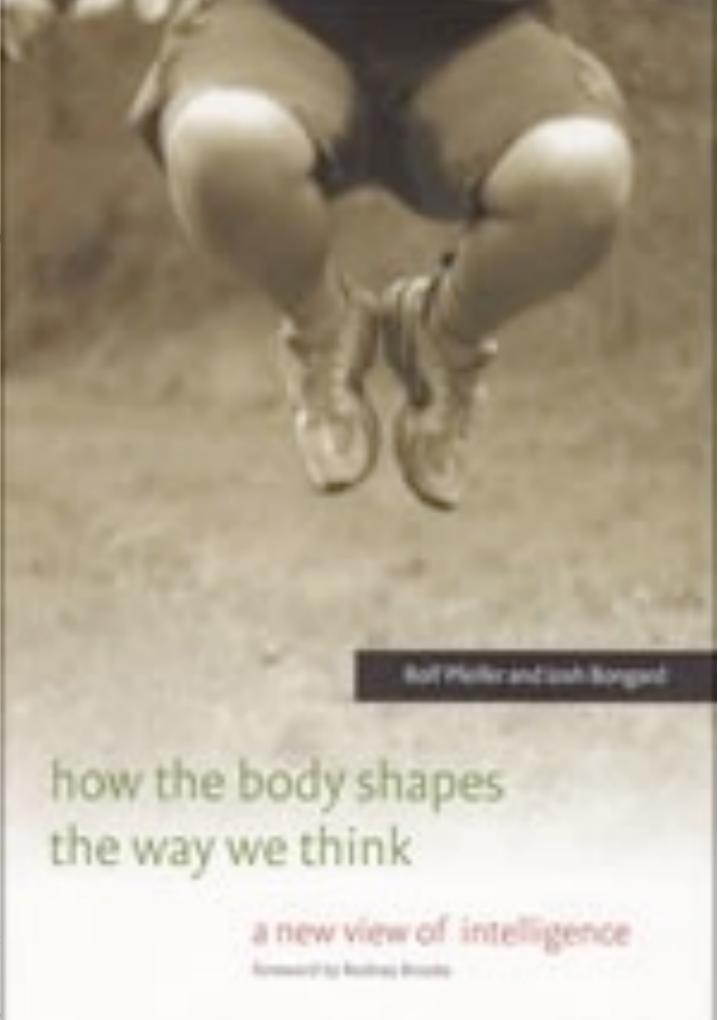
Rolf Pfeifer and Josh Bongard

How the body shapes the way we think — a new view of intelligence

MIT Press, 2007

#### Illustrations by Shun Iwasawa





#### Typical format of lectures

- 09.00 Student presentation: one of the sites
- 09.10 Lecture on embodied intelligence (Rolf)
- 09.55 Break
- 10.00 Guest speaker 1
- 10.30 Guest speaker 2
- 11.00 End of lectures









#### Welcome

to the "ShanghAl Lectures"

27 September 2012









## Thank you!

- participating sites
- students
- technicians (MELS, University of Zurich; SWITCH; Shanghai Jiatong University; Univ. of Madrid, Carlos III)
- guest speakers
- sponsors
- Nathan :-)
- many others









#### Welcome

to the "ShanghAl Lectures"

—> Introduction by Nathan Labhart, UZH

27 September 2012









## Introduction to the ShanghAl Lectures

Nathan Labhart

researcher at Artificial Intelligence Laboratory organizer and "brain" of lecture series expert on distant teaching and presence technologies











## The "Roboy" project

Guest speaker: Pascal Kaufmann

neuroscientist

entrepreneur

researcher at AI Lab

initiator of the "Roboy" project (a new type of robot)













#### End of welcome session

Thank you for your attention!

stay tuned for lecture 1 "Intelligence — an eternal conundrum"

