The "Poetics" of Everyday Life: Grounding Resources and Mechanisms for Artificial Agents

Fact Sheet

Project Information

Funded under
FP7-ICT

POETICON

Grant agreement ID: 215843

Closed project

Overall budget
€ 4 273 545

EU contribution
€ 3 250 000

Coordinated by
ATHINA-EREVNITIKO KENTRO KAINOTOMIAS STIS TECHNOLOGIES TIS PLIROFORIAS, TON EPIKOINONION KAI TIS GNOSIS

Greece

Start date
1 January 2008

End date
31 December 2010

Project description

Cognitive Systems, Interaction, Robotics
Discovering the "languages" of sensorimotor representations and the correspondences with natural language

Reproducing an act with sensorimotor means and using fine natural language for communicating the intentionality behind the act is what Aristotle called "Poetics".
POETICON explores the "poetics of everyday life", i.e. the synthesis of sensorimotor representations and natural language in everyday human interaction. This is related to an old problem in Artificial Intelligence on how meaning emerges, which is approached here in a new way. POETICON follows an empirical approach for discovering the "languages" of sensorimotor representations and the correspondences with natural language; guided by experiments in psychology and neuroscience, it employs cutting-edge equipment and established cognitive protocols for collecting face and body movement measurements, visual object information and associated linguistic descriptions from interacting human subjects, with a two-fold objective:

a) The creation of the PRAXICON, an extensible computational resource which associates symbolic representations (words/concepts) with corresponding sensorimotor representations and that is enriched with information on patterns among these representations for forming conceptual structures.

b) The exploration of the association of symbolic and sensorimotor representations through cognitive and neurophysiological experiments and experimentation with a humanoid as driving forces and implementation tools for the development of the PRAXICON, respectively.

POETICON views a cognitive system as a set of different languages (the spoken, the motor, the vision language and so on) and provides a set of tools for parsing, generating and translating among them. Through inter-disciplinary research, it contributes to the exploration of what integration in human cognition is and how it can be reproduced by intelligent agents. This is an ambitious first step for revealing and conquering the "poetics of everyday life".

Fields of science

Programme(s)

Topic(s)

Call for proposal

FP7-ICT-2007-1

Funding Scheme

CP - Collaborative project (generic)
Coordinator Contact

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Coordinator

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Contact the organisation

Activity type
Research Organisations
EU contribution
€ 881 852

Administrative Contact
Markos Drakos (Mr)

Participants (5)

MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV

Germany
EU contribution
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80539 Munchen

Activity type
Research Organisations

Contact the organisation

Administrative Contact
Roland Biesinger (Mr)

UNIVERSITA DEGLI STUDI DI FERRARA

Italy
EU contribution
€ 476 691

Address
Via Ariosto 35
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Activity type
Higher or Secondary
Education Establishments
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<tr>
<td>FONDAZIONE ISTITUTO ITALIANO DI TECNOLOGIA</td>
<td>Italy</td>
<td>€ 310,870</td>
<td>Via Morego 30, 16163 Genova</td>
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<td>UNIVERZA V LJUBLJANI</td>
<td>Slovenia</td>
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<td>THE UNIVERSITY SYSTEM OF MARYLAND FOUNDATION, INC.</td>
<td>United States</td>
<td>€ 642,771</td>
<td>Metzerott Road 3300, 20783 Adelphi</td>
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