16th International Conference on Perception and Action

Daily Program

July 6 – 11 2011

Universidade Federal de Minas Gerais

Organizing Committee

Paula L. Silva, Juliana Ocarino, Marisa Mancini, Sérgio Fonseca, Rodolfo Benda, Herbert Ugrinowitsch, Thales de Souza

Sponsors





Fundação de Amparo à Pesquisa do Estado de Minas Gerais



Daily Program

Wednesday, July 6

17:30 – 19:30 Conference Registration Hotel Estalagem das Minas Gerais, Ouro Preto, Brazil

18:30 – 22:30 Opening reception Hotel Estalagem das Minas Gerais, Ouro Preto, Brazil

Thursday, July 7

08:00 – 08:45 Conference Registration

08:45 – 09:00 Opening Remarks – ICPA 16 organizers

09:00 – 10:20 Symposium 1: Tensegrity: a functional architecture for haptic perception Organizer: Sérgio Fonseca

> Tensegrity architecture: from cell to musculo-skeletal system Sérgio Fonseca

Evidence of tensegrity properties in the musculoskeletal system: Pre-stress and tensional continuity *Thales de Souza*

Tensegrity perceptual hypothesis Michael T. Turvey

10:20 – 10:50 Break

10:50 – 12:20 Open Forum A

Multifractal heterogeneity in exploration for whole-part selective perception Zsolt palatinus, Damian G. Stephen, Yoshi Kobayashi, Jeffrey-Kinsella Shaw, Michael T. Turvey

Haptic Perception of the Affordances of Another Person Hiroyuki Mishima, Mamoru Sawada, & Hiroshi Inou

Illusions are affordances: a comment on Müller-Lyer's phenomenon perceptions through tactile sense and vision *Marcelo Santos, John M.Kennedy*

What You are Doing Influences What You See: The Influence of Applied Torque on Visual Heaviness Perception Laura Bachus, Kevin Shockley & Michael A. Riley

12:20 - 13:30 LUNCH

13:30 – 15:00 Poster Session I

15:00 – 16:30 Open Forum B

In Critical Situations, Affordances Still Influence Speed Perception Jessica Witt, Mila Sugovic

Running for Catchable and Uncatchable Fly Balls Frank Zaal, Harjo J. de Poel, Joanne Smith, & Gert-Jan Pepping

Expert Affordance Perception and Kinematic Information Julie Weast, Ashley Walton, Kevin Shockley, and Michael A. Riley

Affordance and abduction: a possible convergence of Gibson and Peirce Katia B. C. Pessoa, Luciane Rodrigues, Gilberto César L. Rodrigues

16:30 - 17:00 Break

17:00 – 18:20 Symposium 2: Learning in action <u>Organizer: Claire Michaels</u>

> Introductory remarks Claire Michaels & David Jacobs

Competing strategies for partial length perception Claire Michaels & Zsolt Palatinus

Fractality of Exploration Predicts Learning and Transfer in Dynamic Touch Damian G. Stephen¹ & Alen Hajnal²

Learning of Visually-Guided Action: An Information-Space Analysis of Pole Balancing

Daniela V. Vaz^{1,2}, David Jacobs³, & Claire Michaels²

Friday, July 8

09:00 – 10:20 Symposium 3: Understanding the Role of the Action System in Constraining Perception <u>Organizer: Eliah White</u>

Introductory remarks Michael Riley

Multimodally Specified Effort and Distance Perception Eliah White, Kevin Shockley, & Michael A. Riley

Getting in Touch With Your Inner Gibson: Reconciling Action-Specific and Ecological Approaches Jessica Witt & Michael Riley

10:20 – 10:50 Break

10:50 – 12:20 Open Forum C

Avoiding Obstacles: Strategy Changes as a Result of Visual Field Limitation Sander E.M. Jansen, Alexander Toet, Peter J. Werkhoven

Function of Tau in Perception and Action of the Automobile Driver in Car-Following Situations *Takayuki Kondoh, Nobuhiro Furuyama, Toshiya Hirose,*

Tochi Sawada, Yoshihiro Miyake

Affordance-based control of overtaking behaviour Antoine Morice, Numa Basilio, Gabriel J. Diaz, Brett B.R. Fajen, Reinoud J. Bootsma, and Gilles Montagne

Effect of Air-flow Perception on Reaching Movements Kiyohide Ito, Hiroshi Inou, Mamoru Sawada, and Hiroyuki Mishima

12:20 – 13:30 LUNCH

13:30 – 15:00 Poster Session II

15:00 - 16:30 Open Forum D

Longitudinal Development of Looming: How optical variables may become information

Ruud van der Weel and Audrey van der Meer

Learning to Observe and Create Fractal Events Julia Blau and Claudia Carello

Visual control of racket motion in rhythmic ball bouncing Isabelle A. Siegler, C. Bazile, and William H. Warren

The Body as Odometer Steven Harrisson

16:30 – 17:00 Break

17:00 – 18:20 Symposium 4: Perceiving Affordances for Others in Social

Systems Organizers: Pedro Passos e João Barreiros

Introductory remarks Pedro Passos & João Barreiros

Perceiving Affordances from the others in Team Sports – a 2v1 analysis in Rugby Union

Pedro Passos & Orlando Fernandes

Shaping Decisions in Social Systems: Affordances and Social, Neural, and Physiological Constraints on Action. *Gert-Jan Pepping & Harjo de Poel*

Influent factors in the perception of affordances for children Rita Cordovil & João Barreiros

Saturday, July 9

09:00 – 10:20 Symposium 5: (Still) Growing Up: What should we be a realist about in the cognitive and behavioural sciences? <u>Organizers:</u> Fred Hasselman¹, Ralf F.A. Cox¹, Michael P. Seevinck²

Introductory remarks Fred Hasselman¹, Ralf F.A. Cox¹, Michael P. Seevinck²

Theory of agency for all organisms: What kind of science does it require? *Michael T. Turvey*

Caught in the Undertow: There is structure beneath the ontic stream *Fred Hasselman, M.P. Seevinck, Ralf F.A. Cox*

10:20 - 10:50 Break

10:50 – 12:20 Open Forum E

Reflections on Ecological Psychology from Arakawa's Bioscleave House *William Mace*

The Problems of Extended Mind and Ecological Psychology *Tetsuya Kono*

Habit as a binary relation between antecedent and consequent: could the antecedent be understood as a social affordance? Ramon Andrade and Itala M. Loffredo D'Ottaviano

How Plato is used to brainwash helpless toddlers Thomas A. Stoffregen

12:20 – 13:30 LUNCH

13:30 – 15:00 Poster Session II

15:00 - 16:30 Open Forum F

Affordances in the context of new information technology M.E.Q. Gonzalez, J.A. Quilici-Gonzalez, M.C. Broens, G. Kobayashi

Acquisition and Transfer of Skills using Ecologically-oriented Multimodal Human-Machine Interfaces Benoit Bardy

Surprising effects of bidirectional coupling between humans and humanoids in the VPI paradigm Scott Kelso

Speaker cancellation (one more talk TBA)

16:30 - 17:00 Break

17:00 – 18:20 Symposium 6: Communicative Coordination and Cooperation in Music and Speech Organizer: Hani Camille Yehia

> Introductory remarks Hani Camille Yehia

Evidence for Self-Other Effects and Structure-Related Attentional Mechanisms in the Primo/Secondo Performances of Clarinetists Rafael Laboissière, Davi Alves Mota, Thiago de Almeida Magalhães Campolina, Hani Camille Yehia, Maurício Alves Loureiro

Speech Sounds as Dynamical Patterns: Speaker-Hearer Coordination Thais Silva, Thaïs Cristófaro Silva, Hani Camille Yehia, Ricardo Napoleão, Maria Cantoni, Gustavo Almeida

Using Instantaneous Correlation to Quantify Intra and Inter Subject Coordination During Communicative Behavior Adriano Vilela Barbosa, Rose-Marie Déchaine, Martin Oberg, Philip E. Rubin, Hani Camille Yehia and Eric Vatikiotis-Bateson

Sunday, July 10

09:00 – 10:20 Symposium 7: Social coordination's breakdown in pathology Organizers: Ludovic Marin and Richard Schimidt

Introductory remarks Ludovic Marin and Richard C. Schmidt

Overview on Social Coordination and Connection, With Implications for Special Populations

Kerry L. Marsh, Anjana N. Bhat

Interpersonal Coordination in Schizophrenia

Manuel Varlet, Ludovic Marin, Stephane Raffard, Richard C. Schmidt, Delphine Capdevielle, Jean-Philippe Boulenger, Jonathan Del-Monte, Benoit G. Bardy

Exploring the Time-Dependent Unfolding of Social Coordination in Children with Autism

Paula Fitzpatrick, Rachel Diorio, Michael J. Richardson, R. C. Schmidt

10:20 - 10:50 Break

10:50 – 12:20 Open Forum G

Vicarious action: the case of a Japanese calligrapher with quadriplegia *Tetsushi Nonaka*

Task demand and supra-postural responses in typical and atypical Thomas Stoffregan, Michael G. Wade, Fu-Chen Chen, and Chia-Liang Tsai

Effects of eye movements and aging on postural control Stefane A. Aguiar & Sérgio Tosi

Intercepting a moving traffic gap: perception-coupling action during intersection crossing

Reinoud J. Bootsma, Nicolas Louveton, Catherine Berthelon, and Gilles Montagne

- 12:20 13:30 LUNCH
- 13:30 13:45 Eric Charles' Text Book Project
- 13:45 14:00 Conference Photo
- 14:00 15:00 ISEP Business Meeting Coordinator: William Mace

15:00 – 16:30 Open Forum H

Effect of Frequency and Visual Stimuli on Rhythmic Coordination Alan Armstrong, J. Issartel, M. Varlet, L. Marin

Uni-manual rhythmic behavior across a range of frequencies analyzed using the canonical-dissipative method Dobromir Dotov, Till Frank

Mode Analyses on the Kinematical Structure of Common Motion Patterns Sadahiro Senda, Nanase Takata, Kazuki Nakai and Katsuyoshi Tsujita

Dynamics of Movement Interference Michael J. Richardson & Richard Schmidt

16:30 – 17:00 Break

17:00 – 18:20 Symposium 8: A Natural-Physical Approach to Perception Action-Cognition

Organizer: Claudia Carello

Introductory remarks Claudia Carello

Perception-Action Cycles: A direct and deep connection with Thermodynamic Principles

Michael T. Turvey

Plant Intelligence Claudia Carello

On the Behavior of Beads and Cells James A. Dixon and Damian G. Stephen