

# Program ICPA2019

## Groningen, The Netherlands

Program version 21 June 2019

### Wednesday 3 July

Location Main Building University of Groningen ('Academiegebouw')  
Broerstraat 1, Groningen

- 18.00-19.00 Welcome drinks  
Welcome speech – Koen Lemmink (Head of Center of Human Movement Sciences, UMCG)
- 19.00-21.00 Dinner

### Thursday 4 July

Blue Lecture Hall ('Blauwe Zaal')  
University Medical Center Groningen (UMCG), Hanzeplein 1, Groningen

- 8.30-8.45 Opening – Raoul Bongers (Conference Chair)
- 8.45-9.00 Welcome – Marianne Joëls (Dean Medical Faculty, UMCG)
- 9.00-10.10 SYMPOSIUM: The task as the unit of analysis in ecological psychology  
Baggs  
Barlett School of Architecture, LONDON, United Kingdom  
CHAIR: De Poel

Ecological psychology: a science of tasks?

Baggs

Barlett School of Architecture, LONDON, United Kingdom

On the practical benefits of a task-oriented approach to perception and action: Implications to the understanding of functional resilience

Silva

University of Cincinnati, CINCINNATI, United States of America

Understanding Solution Emergence in Multiagent Interactions using Task-Dynamics

Nalepka<sup>1</sup>, Kallen<sup>1</sup>, Chemero<sup>2</sup>, Saltzman<sup>3</sup>, Richardson<sup>1</sup>

<sup>1</sup>Macquarie University, SYDNEY, Australia

<sup>2</sup>University of Cincinnati, CINCINNATI, United States of America

<sup>3</sup>Boston University, BOSTON, United States of America

Task Dynamics and the Information They Create: Mechanisms of Events & Encounters

Wilson

Leeds Beckett University, LEEDS, United Kingdom

- 10.10-10.40 Break with refreshments

10.40-11.50 SYMPOSIUM: Nested Affordances

Wagman<sup>1</sup>, Stoffregen<sup>2</sup>

<sup>1</sup>Department of Psychology, NORMAL, United States of America

<sup>2</sup>School of Kinesiology, MINNEAPOLIS, United States of America

CHAIR: Raczaszek-Leonardi

Nestedness in Complex Situations in Human Life

Rietveld

University of Amsterdam, AMSTERDAM, Netherlands

Development of skills to use specific affordances: Changes in infant-mother dyads around transitions in infant feeding

Nonaka

Graduate School of Human Development and Environment, KOBE, Japan

Nesting of affordances in a means-ends hierarchy

Stoffregen<sup>1</sup>, Wagman<sup>2</sup>

<sup>1</sup>University of Minnesota, MINNEAPOLIS, United States of America

<sup>2</sup>Illinois State University, NORMAL, United States of America

Empirical evidence for sensitivity to nesting of affordances as a means-ends hierarchy

Wagman<sup>1</sup>, Stoffregen<sup>2</sup>

<sup>1</sup>Department of Psychology, NORMAL, United States of America

<sup>2</sup>School of Kinesiology, MINNEAPOLIS, United States of America

Open Topics

CHAIR: de Jonge-Hoekstra

11.50-12.05 Crawling experience predicts infants' behaviour near risky drop-offs - even when they are walking!

Burnay<sup>1</sup>, Cordovil<sup>2</sup>, Anderson<sup>3</sup>, Button<sup>4</sup>, Pereira<sup>2</sup>, Liebrechts<sup>5</sup>, Croft<sup>2</sup>

<sup>1</sup>Centre of Exercise and Sports Science Research, School of Medical and Health Sciences, Edith Cowan University, PERTH, Australia

<sup>2</sup>Laboratory of Motor Behavior, CIPER, Faculdade de Motricidade Humana, Universidade de Lisboa, LISBOA, Portugal

<sup>3</sup>Department of Kinesiology, San Francisco State University, SAN FRANCISCO, United States of America

<sup>4</sup>School of Physical Education, Sport and Exercise Sciences, University of Otago, DUNEDIN, New Zealand

<sup>5</sup>School of Medical and Health Sciences, Edith Cowan University, PERTH, Australia

12.05-12.20 Development of active manipulative behaviour in early infancy

Ferronato<sup>1</sup>, Dantas<sup>2</sup>, Manoel<sup>2</sup>

<sup>1</sup>Paulista University, SÃO PAULO, Brazil

<sup>2</sup>University of São Paulo, SÃO PAULO, Brazil

12.20-12.35 Can a robot have an unintentional behavior when interacting with a human?

Marin<sup>1</sup>, Aubin<sup>1</sup>, Ansermin<sup>2</sup>, Salesse<sup>1</sup>, Bardy<sup>1</sup>, Mostafaoui<sup>2</sup>

<sup>1</sup>EuroMov Lab, University of Montpellier, MONTPELLIER, France

<sup>2</sup>ENSEA, University of Cergy-Pontoise, UMR CNRS 8051, CERGY-PONTOISE, France

12.35-13.20 Lunch

13.20-15.20 Poster session

- 15.20-16.30 **SYMPOSIUM: Non-representational dialogues: ecological psychology and enaction**  
 van Dijk<sup>1</sup>, Rietveld<sup>2</sup>  
<sup>1</sup>University of Antwerp, ANTWERP, Belgium  
<sup>2</sup>University of Amsterdam, AMSTERDAM, Nederland  
**CHAIR: Paxton**
- What Shall the Unit of Analysis be for a Non-Representational Approach to Perception-Action?**  
 Heft  
 Denison University, GRANVILLE, United States of America
- Ecological Psychology and Radical Enactivism: Time to Contact?**  
 Myin  
 Department of Philosophy, ANTWERP, Belgium
- How architecture affords being-in-the-world? Exploring the enactive, embodied, affective view of spatial experience**  
 Jelic  
 Department of Architecture, Design and Media Technology, Aalborg University, AALBORG, Denmark
- Avoiding the philosophic fallacy: affordances as real yet precarious**  
 van Dijk  
 University of Antwerp, ANTWERP, Belgium
- 16.30-16.50 **Break (short) with refreshments**
- Open topics**  
**CHAIR: Hajnal**
- 16.50-17.05 **Detecting invariants in probabilistic environments: The role of spatial and temporal order of events**  
 Covarrubias, Covarrubias Godínez, Bravo de Anda  
 University of Guadalajara, OCOTLÁN, Mexico
- 17.05-17.20 **Multisensory Perception and the Neuroscience of Supramodal Information**  
 Rosenblum  
 University of California, Riverside, RIVERSIDE, United States of America
- 17.20-17.35 **Inaudible High-frequency Waves Facilitates Active Perception-Action Cycle**  
 Ito<sup>1</sup>, Sawada<sup>2</sup>  
<sup>1</sup>Future University Hakodate, HOKKAIDO, Japan  
<sup>2</sup>DENSO Corporation, AICHI, Japan
- 17.35-17.50 **Visually-guided braking: Controlling deceleration and acceleration with proportional rate control**  
 Kadihasanoglu  
 TOBB University of Economics and Technology, Department of Psychology, ANKARA, Turkey
- 17.50-18.05 **The Behavioral Dynamics Approach to Sound Localization**  
 Riehm, Vanderelst, Shockley, Chemero  
 University of Cincinnati, CINCINNATI, United States of America
- 18.05-18.20 **Visual and Haptic Perception of Affordance Properties of Feelies**  
 Dowell<sup>1</sup>, Surber<sup>1</sup>, Masoner<sup>1</sup>, Clark<sup>1</sup>, Wagman<sup>2</sup>, Hajnal<sup>1</sup>  
<sup>1</sup>University of Southern Mississippi, HATTIESBURG, United States of America  
<sup>2</sup>Illinois State University, NORMAL, United States of America
- 18.30-19.30 **ISEP meeting**
- 20.00-22.30 **Dinner 't Feithuys ([www.restaurant-feithhuis.nl](http://www.restaurant-feithhuis.nl))**

## Friday 5 July

Blue Lecture Hall ('Blauwe Zaal')

University Medical Center Groningen (UMCG), Hanzeplein 1, Groningen

8.30-9.40 SYMPOSIUM: Improvisation and Creativity

Rodger

Queen's University Belfast, BELFAST, United Kingdom

CHAIR: Baggs

Perception of action capabilities in climbing

Seifert<sup>1</sup>, Dicks<sup>2</sup>, Wittmann<sup>3</sup>, Wolf<sup>3</sup>

<sup>1</sup>CETAPS Laboratory EA3832, Faculty of Sport Sciences, MONT SAINT AIGNAN, France

<sup>2</sup>Department of Sport and Exercise Science, University of Portsmouth, PORTSMOUTH, United Kingdom

<sup>3</sup>ETH, ZURICH, Switzerland

The role of skill and constraints manipulation on the emergence of movement variability and creative motor actions

Orth

Department of Health & Medical Sciences Swinburne University of Technology, MELBOURNE, Australia

Different patterns of exploration in perceived and actualized affordances during discovering the affordance of gap-crossing ability

Smith, Van Dijk, Bongers

Center for Human Movement Sciences, GRONINGEN, Netherlands

Using digital musical instruments to study the learning of affordances in support of improvised music performance

Rodger

Queen's University Belfast, BELFAST, United Kingdom

Open Topics

CHAIR: Correia

9.40-9.55 Coordinative Gait Adaptations to Visual Task Performance during Object Transport

Amado, Palmer, Hamill, van Emmerik

University of Massachusetts Amherst, AMHERST, United States of America

9.55-10.10 During rhythmic pointing movements, the underlying synergies change with task constraints, and constituent DOF vary in stability

Valk, Mouton, Otten, Bongers

University Medical Center Groningen, GRONINGEN, Netherlands

10.10-10.25 The complexity of coordination in carrying, reaching, and driving: The search for fields of dexterity

Hodges, Ventura, Lundberg

Gordon College, WENHAM, MA, United States of America

10.25-10.40 Studying Complex Adaptive Systems with Internal States: A Recurrence Based Approach To Idiographic Multivariate Time Series Analysis

Hasselmann

Radboud University, NIJMEGEN, Netherlands

10.40-11.10 Break with refreshments

11.10-12.20 SYMPOSIUM: Gibsonian neuroscience  
de Wit  
Muhlenberg College, ALLENTOWN, United States of America  
CHAIR: Caljouw

Stinky business: a behavioral study of vicarious functioning in anterior insula  
de Wit

Muhlenberg College, ALLENTOWN, United States of America

Gibsonians Need Neuroscience (and Vice Versa)

Raja

Rotman Institute of Philosophy, LONDON, Canada

Infants' brain responses to looming danger: degeneracy of neural connectivity patterns

van der Weel, van der Meer

Norwegian University of Science & Technology (NTNU), TRONDHEIM, Norway

Anticipating affordances: ecological psychology meets selectionist neuroscience

Bruineberg<sup>1</sup>, Rietveld<sup>2</sup>

<sup>1</sup>Department of Philosophy, AMSTERDAM, Netherlands

<sup>2</sup>Amsterdam Medical Centre, AMSTERDAM, Netherlands

12.20-13.05 Lunch

13.05-15.05 Poster Session

15.05-16.15 SYMPOSIUM: Action-Perception interpersonal dynamics and group behaviour when  $N > 2$

Dotov<sup>1</sup>, Bardy<sup>2</sup>

<sup>1</sup>LIVELab, McMaster University, HAMILTON, Canada

<sup>2</sup>EuroMov, MONTPELLIER, France

CHAIR: Blau

Multi-agent crowd dynamics: Visual coupling and network reconstruction

Warren<sup>1</sup>, Dachner<sup>2</sup>

<sup>1</sup>Brown University, PROVIDENCE, RI, United States of America, United States of America

Role of time delays in dyadic and group interactions

Slowinski, Al-Ramadhani, Tsaneva-Atanasova

University of Exeter, EXETER, United Kingdom

Emergence of motor coordination in human groups.

Calabrese<sup>1</sup>, De Lellis<sup>1</sup>, Bardy<sup>2</sup>, Di Bernardo<sup>1</sup>

<sup>1</sup>University of Naples- Federico II, NAPLES, Italy

<sup>2</sup>University of Montpellier, MONTPELLIER, France

Collective performance facilitates anticipatory synchronization in group drumming

Dotov, Trainor

LIVELab, McMaster University, HAMILTON, Canada

- Open Topics  
CHAIR: Casanova
- 16.15-16.30 Ecological optics, a prisoner of geometry: Gibson 1979±40  
Kadar  
University of Portsmouth, PORTSMOUTH, United Kingdom
- 16.30-16.45 Coordination of resonant tensegrity structures  
Fultot  
University of Connecticut, CESP, STORRS, United States of America
- 16.45-17.00 Accessing the world without agents: Metabolism and cobolism  
Keijzer  
Department of Theoretical Philosophy, GRONINGEN, Netherlands
- 17.00-17.20 Break (short) with refreshments
- 17.20-18.30 SYMPOSIUM : Integrating the Ecologies of Language, Communication, and Development  
Catherine Read<sup>1</sup>, Raczaszek-Leonardi<sup>2</sup>  
<sup>1</sup>Rutgers University, NEW BRUNSWICK, United States of America  
<sup>2</sup>Warsaw University, WARSAW, Poland  
CHAIR: Covarrubias
- Attentional Actions and the Complex Interplay of Time-scales  
van den Herik  
Erasmus University Rotterdam, ROTTERDAM, Netherlands
- Meaning is Use: Gibson on Second-Hand Perception  
Kiverstein  
Senior Researcher, AMSTERDAM, Netherlands
- Differences in Perceptual-Environment Systems across Typical and Atypical Development  
Rader  
Ithaca College, ITHACA, United States of America
- Integrating timescales for the emergence of symbolic communication in development  
Raczaszek-Leonardi, Rossmanith  
University of Warsaw, WARSAW, Poland
- Direct Perception and Integrationist Communication in the Joint Construction of Metaphors across Speakers and Utterances  
Read  
Rutgers University, NEW BRUNSWICK, United States of America
- 18.30-18.40 Update on the journal 'Ecological Psychology'  
Schmidt - Editor  
Department of Psychology, WORCESTER MA, United States of America
- 18.45 Departure busses at entrance UMCG
- 19.30-22.15 Dinner at De Diek'n ([www.dediek.nl](http://www.dediek.nl))
- 23.00 Return at UMCG

## Saturday 6 July

Blue Lecture Hall ('Blauwe Zaal')

University Medical Center Groningen (UMCG), Hanzeplein 1, Groningen

8.30-9.40 SYMPOSIUM: Philosophical Responses to Ecological Psychology

Hatfield

Philosophy, Cohen Hall 433, PHILADELPHIA, United States of America

CHAIR: Wilson

Gibson and the Geometric Layout: Not Ecological Enough?

Hatfield

Philosophy, Cohen Hall 433, PHILADELPHIA, United States of America

Affordances as Vector Fields

Isaac

University of Edinburgh, EDINBURGH, United Kingdom

Representing and Tracking

Orlandi

UC Santa Cruz, SAN FRANCISCO, United States of America

9.40-10.50 SYMPOSIUM: Multi-agent Systems: Task-Dynamics, Asymmetries, Sub-Ensembles and Illustrative Landscapes

Passos<sup>1</sup>, Richardson<sup>2</sup>

<sup>1</sup>CIPER, Faculdade de Motricidade Humana, University of Lisbon, LISBON, Portugal

<sup>2</sup>Centre for Elite Performance, Expertise and Training Department of Psychology Ma, SYDNEY, Australia

CHAIR: Rodger

Task-Dynamics of Multi-Agent Activity

Richardson<sup>1</sup>, Kallen<sup>2</sup>, Saltzman<sup>3</sup>

<sup>1</sup>Center for Elite Performance, Expertise and Training, SYDNEY, Australia

<sup>2</sup>Macquarie University, SYDNEY, Australia

<sup>3</sup>Boston University, BOSTON, United States of America

Functional asymmetries in multi-level, multi-scale, multi-agent coordination.

Davis

Center for Cognition, Action, & Perception, CINCINNATI, United States of America

Emergent interpersonal coordination in high-performance association football

Rein

Institute of Training and Computer Science in Sports, COLOGNE, Germany

Players' relative position set possibilities of action to illustrate a landscape of passes towards the goal in football

Passos<sup>1</sup>, Amaro Silva<sup>2</sup>

<sup>1</sup>CIPER, Faculdade de Motricidade Humana, University of Lisbon, LISBON, Portugal

<sup>2</sup>Instituto Dom Luiz, Faculdade de Ciências, Universidade de Lisboa, LISBON, Portugal

10.50-11.20 Break with refreshments

11.20-12.30 SYMPOSIUM: Action Coordination in Non-Human Self-Organizing Collectives: Multidisciplinary Lessons from Living and Nonliving Systems  
Chiovaro, Paxton  
Center for the Ecological Study of Perception and Action, STORRS, United States of America  
CHAIR : de Wit

Perception- action feedback during Endothelial cell decisions to grow new blood vessels

Bentley

The Francis Crick Institute, LONDON, United Kingdom

Collective Behavior in Dissipative Structures

De Bari, Dixon, Chen

University of Connecticut, STORRS, United States of America

Behavioral consequences of sensory system constraints in the firefly

Moiseff<sup>1</sup>, Copeland<sup>2</sup>

<sup>1</sup>University of Connecticut, STORRS, CT, United States of America

<sup>2</sup>Georgia Southern University, STATESBORO, GA, United States of America

Busy Bees: Task Allocation in *Apis mellifera* as Inspiration for Engineering Effective Human Collectives

Chiovaro, Paxton

Center for the Ecological Study of Perception and Action, STORRS, United States of America

12.30-13.15 Lunch

13.15-14.45 Poster session

14.45-15.55 SYMPOSIUM: Becoming one: How hand movements and vocalizations emerge together

De Jonge-Hoekstra

Developmental Psychology, University of Groningen, GRONINGEN, Netherlands

CHAIR: Smith

The development of vocal-manual coordination in late infancy

Abney, Borjon, Yu, Smith

Indiana University, BLOOMINGTON, United States of America

Complexity matching between gestures and speech in easy and difficult tasks

De Jonge-Hoekstra<sup>1</sup>, Van der Steen<sup>2</sup>, Dixon<sup>3</sup>, Cox<sup>1</sup>

<sup>1</sup>Developmental Psychology, University of Groningen, GRONINGEN, Netherlands

<sup>2</sup>Orthopedagogy, University of Groningen, GRONINGEN, Netherlands

<sup>3</sup>CESPA, University of Connecticut, STORRS, United States of America

Acoustic Specification of Upper Limb Movement in Voicing

Pouw, Paxton, Harrison, Dixon

Center for the Ecological Study of Perception and Action, UCONN, STORRS, United States of America

Adaptation of multimodal communication strategies to noise and failure: evidence from a dyadic interaction task

Trujillo<sup>1</sup>, Drijvers<sup>1</sup>, Holler<sup>2</sup>, Özyürek<sup>2</sup>

<sup>1</sup>Donders Institute for Brain, Cognition and Behavior, NIJMEGEN, The Netherlands

<sup>2</sup>Max Planck Institute for Psycholinguistics, NIJMEGEN, The Netherlands

15.55-16.15 Break (short) with refreshments



Open topics

- 16.15-16.30 Ecological investigation of artistic performance and reception  
Palatinus<sup>1</sup>, Szitas<sup>2</sup>, Fekete<sup>2</sup>  
<sup>1</sup>Department of cognition and neuroscience, SZEGED, Hungary  
<sup>2</sup>Institute of Psychology, University of Szeged, SZEGED, Hungary
- 16.30-16.45 Why ecological psychology is needed in landscape studies. A methodological and pedagogical analysis  
Menatti  
UMR 5319 Passages CNRS; École Nationale Supérieure d'architecture et de Paysage de Bordeaux, TALENCE CEDEX, France
- 16.45-17.00 Escalation and destruction: Evidence for the reorganization of the interpersonal system during conflict  
Paxton  
Department of Psychological Sciences, University of Connecticut, STORRS, CT, United States of America
- 17.00-17.15 Switching hybrid dynamics in tennis  
Yamamoto<sup>1</sup>, Yokoyama<sup>1</sup>, Kudo<sup>1</sup>, Gohara<sup>2</sup>  
<sup>1</sup>Nagoya University, NAGOYA, Japan  
<sup>2</sup>Hokkaido University, SAPPORO, Japan
- 17.15-17.30 Bodily Synchrony as an Index of Social Ability and Affiliation in Interviews  
Schmidt<sup>1</sup>, Fitzpatrick<sup>2</sup>  
<sup>1</sup>Department of Psychology, WORCESTER, MA, United States of America  
<sup>2</sup>Assumption College, WORCESTER, MA, United States of America
- 17.30-17.45 Dynamic occlusion reduces the influence of neighbors in human crowds  
Dachner, Warren  
Brown University, PROVIDENCE, United States of America
- 17.45-18.00 Closing remarks – Bill Warren (Chair ISEP)
- 19.30-22.00 Dinner Martinikerk (Martini church, [www.martinikerk.nl](http://www.martinikerk.nl))