

Fourth International Conference on Event Perception and Action
August 24-28, 1987
Congress Centre Stazione Marittima, Trieste, Italy

Monday 24

- 8.00- 9.00 Registration
9.00- 9.45 A Opening Speech by **W. Gerbino**
Welcoming Addresses
9.50-10.30 A Invited Lecture by **G. Johansson**
10.45-13.00 A **W.H. Warren Jr.**, *On Affordances*
10.45-13.00 B **G. Johansson**, *Structure and Motion*
15.00-17.00 A **W.H. Warren Jr.**, *On Affordances*
17.15-19.15 A **R.E. Shaw**, *Goal-Directed Behavior I*
15.00-17.00 B **B. Benelli**, *The Role of Event Representation in Conceptual Development*
17.15-19.15 B **B. Benelli**, *Issues in Cognitive and Social Development*

Tuesday 25

- 8.00-10.30 A **E.J. Gibson, E. Spelke**, *What Infant Research Tells Us about Theories of Perception*
10.45-12.45 A **R.E. Shaw**, *Goal-Directed Behavior II*
8.00-10.00 B **K. von Fieandt**, *Color and Behavior*
10.15-12.45 B **A. Gilchrist**, *Absolute vs. Relational Theories of Lightness Perception*
15.00-19.15 A **M.T. Turvey**, *The Self-Assembly of Rhythmic Movements and the Locomotor Synergism*
15.00-17.00 B **A. Gilchrist**, *Absolute vs. Relational Theories of Lightness Perception*
17.15-19.15 B **M. Sambin**, *Art and Perspective Representation*

Wednesday 26

- 8.00-12.45 A **S. Roncato, J.T. Todd**, *Event Perception and Naive Physics*
8.00- 9.45 B **E. Ladavas**, *Spatial S-R Compatibility Effects*
10.00-13.00 B **R. Luccio**, *From Gegenstände Höherer Ordnung to Higher-Order Invariants*
15.00-19.15 A **S. Runeson, G.P. Bingham, B.A. Kay**, *Dynamic Constraints in Perception and Action*
15.00-19.15 B **M. Sambin**, *Levels of Information in Pictures*

Thursday 27

- 8.00- 9.45 A **H.A. Sedgwick**, *Optic Information for Spatial Layout*
10.00-13.00 A **G.E. Riccio, T.A. Stoffregen**, *The Perception and Control of Orientation*
8.30-12.45 B **R.E. Shaw, J. Rickards**, *Cognition and Instruction*
15.00-19.15 A **E.S. Reed, T. Ingold**, *Doing Things with Tools*
15.00-19.15 B **J. Flach, G. Lintern**, *The Perception and Control of Self-Motion*

Friday 28

- 8.30-12.45 A **L. Arcuri**, *Perceptual and Cognitive Processes in Social Knowing*
8.30-12.45 B **S. Bagnara**, *Errors in Human-Machine Interaction*
14.30-19.00 A **A. Smitsman, P. van Geert**, *Ecological Approach to Cognition*
14.30-16.30 B **L. Arcuri**, *Perceptual and Cognitive Processes in Social Knowing*
16.45-19.00 B **P. Bozzi**, *Music Perception*
19.15 A Final Address by **W.M. Mace**

Monday 24

Morning

W.H. Warren Jr., *On Affordances*.

A potential basis for theories of meaning, tool use and perceptual-motor development. Affordances as scientific concepts; their informational specification; their discovery in development and skill learning; their use in guiding action.

Symposium: **K.M. Newell, E. Thelen, M.T. Turvey, W.H. Warren Jr.**

G. Johansson, *Structure and Motion*.

Perceptual organization of motion trajectories. Motion information and wideangle space perception. Dynamic information and textural segregation. Rigidity and stereokinesis.

Paper Session: **E. Börjesson, C. Casco, I. Davies, W. Smith, S. Sumi, M. Zanforlin.**

Afternoon

W.H. Warren Jr., *On Affordances*.

Paper Session: **C. Castelfranchi, K. Landwehr, L.S. Mark, B.E. McKenzie, C. Palmer, J. Pickering, S. Wilcox.**

R.E. Shaw, *Goal-Directed Behavior I*.

The goals of growth and treatment plans. Theories of evolutionary goals and organism/environment relationship. Cognitive contents and goal-directed behavior.

Symposium : **A. Böök, R.J. Bootsma, N. Harvey, E. Leeuwenberg, D. Parisi, L. Pickenhain, P.C.W. van Wieringen.**

B. Benelli, *The Role of Event Representation in Conceptual Development*.

Event-based knowledge in child development. Formation of basic and super-ordinate categories; narrative thinking; concept of possession; representation of historical events. Organization of schematic vs. categorial knowledge.

Symposium: **A.M. Ajello, L. Arcuri, B. Benelli, A.S. Bombi, W. Deutsch, J. Lucariello, K. Nelson.**

B. Benelli, *Issues in Cognitive and Social Development*.

Paper Session: **A. Claar, M. D'Alessio, C. Dent, L. Maresca, H. Peraita Adrados.**

Tuesday 25

Morning

E. J. Gibson, E. Spelke, *What Infant Research Tells Us about Theories of Perception*.

Developmental assumptions of traditional theories of perception. Theoretical importance of recent research on perception in infancy.

Symposium: **T. Bower, E. J. Gibson, C. von Hofsten, B. McKenzie, E. Spelke**.

R. E. Shaw, *Goal-Directed Behavior II*.

Symposium: **C. Castelfranchi, H. Kreidler, B. Patten, R. Rosen, O. Rossler, R. E. Shaw, M. Weir**.

K. von Fieandt, *Color and Behavior*.

Perceptual and cognitive aspects of color. The effect of illumination gradients on lightness and hue.

Paper Session: **O. Da Pos, J. Harlahti, P. Korkala, G. Nyman, J. P. Wagemans, J. Weckroth**.

A. Gilchrist, *Absolute vs. Relational Theories of Lightness Perception*.

The brightness/lightness problem. The primacy of relative over absolute luminance information. The relational paradigm and obstacles to a complete theory of lightness perception.

Symposium: **L. E. Arend, S. S. Bergström, W. Gerbino, A. Gilchrist, P. Whittle**.

Afternoon

M. T. Turvey, *The Self-Assembly of Rhythmic Movements and the Locomotor Synergism*.

Infant research as a model for investigating movement control and coordination. Development of walking and running in the context of physical analyses of rhythmic self-organization.

Symposium: **E. C. Goldfield, B. A. Kay, P. Morasso, E. Thelen, M. T. Turvey**.

Paper Session: **P. I. Beek, W. I. Beek, E. Thelen, H. Winold**.

A. Gilchrist, *Absolute vs. Relational Theories of Lightness Perception*.

Paper Session: in preparation.

M. Sambin, *Art and Perspective Representation*.

Robustness of perspective. Distortions in slanted pictures. Non-flat and non-orthogonal picture planes. Implications of unfrozen representation for perceptual geometry.

Paper Session: **J. E. Cutting, M. Massironi, J. Matthews, U. Savardi, J. Tormey**.

Wednesday 26

Morning

S. Roncato, J.T. Todd, *Event Perception and Naive Physics*.

Methods and theories in the study of perception and cognition of physical phenomena. Search for an integrated approach to direct information pick-up and naive laws.

Paper Session: **G.P. Bingham, P. Bozzi, M.K. Kaiser, J.M. Kennedy, P. Legrenzi, W.M. Mace, J.B. Pittenger, D.R. Proffitt, S. Runeson**.

E. Ladavas, *Spatial S-R Compatibility Effects*.

Affordances and compatibility. Hand orientation and limb position in choice reaction time.

Paper Session: in preparation.

R. Luccio, *From Gegenstände Höherer Ordnung to Higher-Order Invariants*.

Historical analyses of the concept of higher-order variable. Implications of Meinong's theory of objects. Invariants in classical psychophysics and ecological approaches. Gestalt properties and event perception.

Paper Session: **I.D. Blair, H. Buffart, N. Caramelli, N. Dazzi, K. Landwehr, A. Luchins, E.H. Luchins, G. Mucciarelli, K. Mulligan, S. Poggi, N. Stucchi**.

Afternoon

S. Runeson, G.P. Bingham, B.A. Kay, *Dynamic Constraints in Perception and Action*.

Theoretical and methodological consequences of dynamic vs. kinematic analyses of perception and action. Dismissal of old dilemmas concerning perceptual ambiguity, meaning and adaptive motor action.

Symposium: **G.P. Bingham, B.A. Kay, J.S. Lappin, R.E. Remez, L.D. Rosenblum, P. Rubin, S. Runeson, R.E. Shaw, J. Solomon, B. Vitale**.

M. Sambin, *Levels of Information in Pictures*.

Pictures as scenes and surfaces, things and media, represented and encountered objects, surrogates of reality and condensed stories. Static displays and formless invariants; the role of geometric laws in pictorial representation.

Symposium: **A. Costall, H. Kreidler, K. Landwehr, S. Rogers, M. Sambin**.

Paper Session: **P. Bonaiuto, F. Boselie, A. Camurri, P. Kardia, P.C.W. van Wieringen**.

Thursday 27

Morning

H.A. Sedgwick, *Optic Information for Spatial Layout.*

Ecological optics and expert systems. Multiple specification of perceived distance. Space perception in impoverished and abnormal conditions.

Paper Session: **N. Bruno, E.C. Campos, J.E. Cutting, C.J. Overbeeke, H.A. Sedgwick, M.H. Stratmann.**

G.E. Riccio, T.A. Stoffregen, *The Perception and Control of Orientation.*

Visual, vestibular, and kinesthetic information for spatial orientation. Sensitivity to dynamic properties of the organism/environment interaction. Available information and the control of orientation.

Symposium: **E.C. Goldfield, D.N. Lee, E.S. Reed, G.E. Riccio, A. Shumway-Cook, T.A. Stoffregen.**

Paper Session: in preparation.

R.E. Shaw, J. Rickards, *Cognition and Instruction.*

Text and pictures in knowledge acquisition. Pictorial specification of dynamic events. Symbolic vs. figural analogies. The role of pictorial information in complex textual discourse.

Symposium: **J.J. Jenkins, M. MacDonald-Ross, H. Mandl, J. Rickards, W. Weimer.**

Paper Session: **C. Carello, C. Dent, J. Flach, J. Lajoie, R.E. Shaw.**

Afternoon

E.S. Reed, T. Ingold, *Doing Things with Tools.*

Tool use, interspecific symbiosis and intraspecific cooperation. Coercive tool use and social domination. Tools and the shaping of human intelligence. Organization of tool behavior.

Symposium: **K. Connolly, K.R. Gibson, W.C. McGrew, C. Palmer, R. Posner, A. Smitsman, T. Wynn, V.P. Zinchenko.**

J. Flach, G. Lintern, *The Perception and Control of Self-Motion.*

Micro-movements for stabilizing posture and macro-movements for navigating in a cluttered environment. Visual and non-visual information for controlling movement.

Symposium: **J. Flach, W.A. van de Grind, G. Jansson, P. Kellman, G. Lintern, D. Mestre, D.H. Owen, N. Saviolo Negrin, T.A. Stoffregen, J.C. van de Vaart, W.H. Warren Jr.**

Friday 28

Morning

L. Arcuri, *Perceptual and Cognitive Processes in Social Knowing*.

Direct pick-up of stimulus-based meaning and activity in social knowledge acquisition. The effect of observation conditions and perceiver's goals on the relationship between perceptual and cognitive factors.

Symposium: **P. Amerio, M. von Cranach, W.D. Crano, J. Good, S. Kreidler, G. Semin, R.E. Shaw, R. Trentin**.

S. Bagnara, *Errors in Human-Machine Interaction*.

Errors in artificial environments. The role of consciousness in behavioral control. Approaches to the design of error-proof systems. Theoretical developments and applications of current research on error.

Paper Session: **S. Bagnara, V. De Kayser, J. Leplat, G. Mancini, J. Rasmussen, J. Reason, A. Rizzo, T. Shallice**.

Afternoon

A. Smitsman, P. van Geert, *Ecological Approach to Cognition*.

Relationship between perceiving and knowing. Direct and mediated perception. Intentionality, symbolic systems and ecological approach. Cognitive development.

Symposium: **B. Bierschenk, I. Bierschenk, A. Costall, H.L. de Jong, W. Noble, A. Zimmer**.

L. Arcuri, *Perceptual and Cognitive Processes in Social Knowing*.

Paper Session: **D.S. Berry, F.P. Colucci, C. Huici Casal, A. Maciá Antón, A.W. Still**.

P. Bozzi, *Music Perception*.

Contextual effects in musical listening. Perceptual structure of the musical phrase at a given time and reference frame of the full composition.

Paper Session: in preparation.