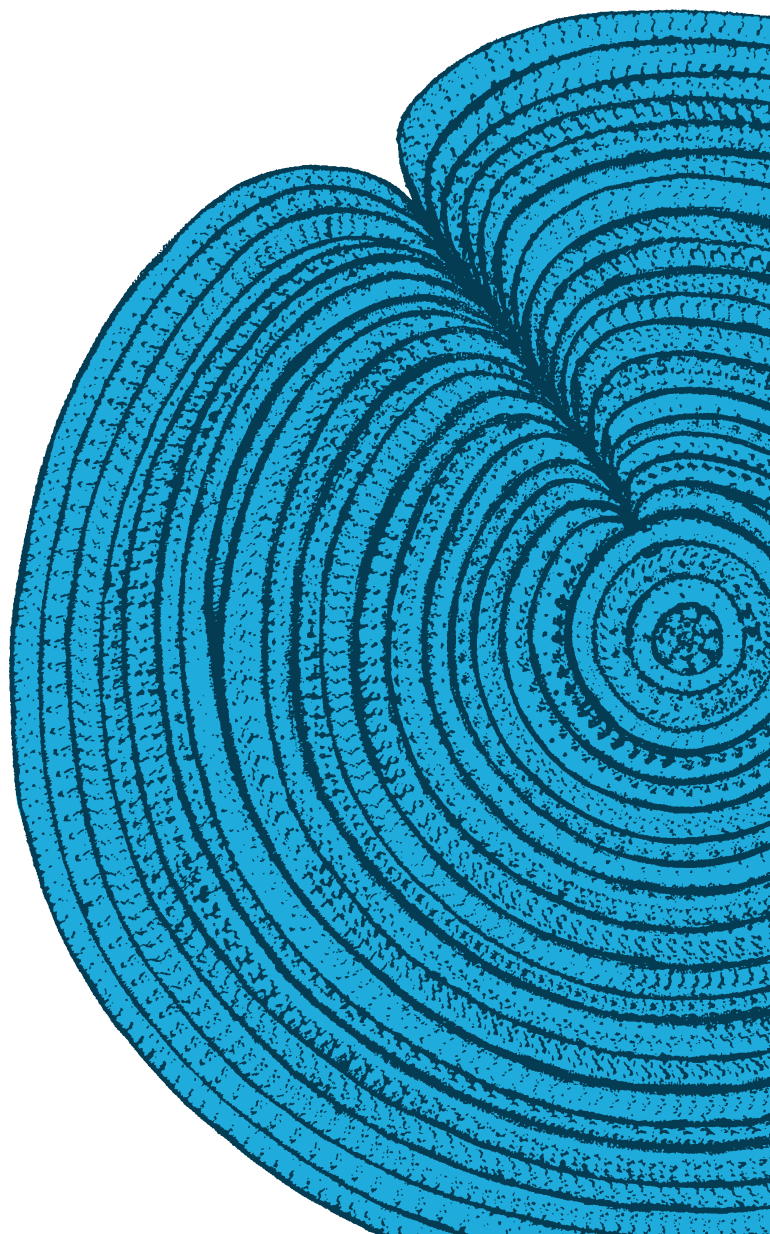




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TSPC2016

Proceedings of the
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November 4



edited by
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EUT

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Preface

This book of proceedings collects the abstracts of talks and posters presented at the *Trieste Symposium on Perception and Cognition 2016*, organized by the Psychology Unit of the Department of Life Sciences, University of Trieste, and held at campus on the 4th of November.

This year TSPC2016 did also include the 24th annual *Kanizsa Lecture*, which has been delivered, as a special event fitting into the long tradition of *Kanizsa Lectures* opened in 1993 by Irvin Rock (see The Kanizsa Lectures list).

The TSPC2016 book of proceedings opens with the abstracts of the 24th Kanizsa Lecture held by the 2016 invited speaker W. Tecumseh Fitch, Department of Cognitive Biology, University of Vienna, Austria.

A second contribution of the TSPC2016 book includes abstracts from the "Roundtable Comparative Perception: A tribute to Professor Mario Zanforlin" (Organizer: Cinzia Chiandetti). The roundtable featured 5 key speakers – Osvaldo Da Pos, Yegor Malashichev, Christian Agrillo, Daniel Osorio, and Meta Virant-Doberlet - in the field of comparative perception and cognition honouring the memory of Professor Mario Zanforlin, who has recently passed away. The invited speakers show that the comparative perspective with which to look at various phenomena that has been Mario's approach will continue to prompt works in the broad fields of perception and cognition. Osvaldo Da Pos, worked on aggressive behaviour and steroid hormones in human and non-human species but later he focused on perception and specifically on colour perception. His main contribution has been the application of the model of transparency to chromatic colours. Within this roundtable, he witnessed the everlasting bond between Padova and Trieste and discussed about the relationship between Stimuli and Context in perception. Yegor Malashichev, works on lateralization and his contribution follows the guidelines of the true European ethological school: observing an organism in its own environment. From

reptiles to whales, from frogs to kangaroos he showed that humans aren't all that unique and claimed about Mother-infant lateral biases in humans and wild animals: conservatism of the phenomenon and its benefits for fitness. Christian Agrillo, after studying biological motion in the chicks, has specialized on numerical representation running experiments with different animal species and recently has started to investigate visual illusion in animals. Christian presented his latest studies in monkeys and fish. Daniel Osorio, studies colour vision and object recognition by observing different animal species from butterflies to primates. He has also investigated symmetry perception in the chick with two influential Mario's students, Lucia Regolin and Giorgio Vallortigara. Daniel is involved in animal welfare and is part of a team writing the guidelines for the use of cephalopods. In his talk, he provides insights on How Cuttlefish see objects. Meta Virant-Doberlet studies vibrational communication in insects. She investigates this intriguing, and unsuspected, signalling trying to respond to all 4 Tinbergen's questions and has presented "A day in a life of a bug linguist".

The third part of the volume collects abstracts of talks and posters presented at regular oral and poster sessions of TSPC2016.

Each abstract published in the proceedings has been evaluated by an anonymous expert reviewer and by the organizers. The list of anonymous reviewers who supported the editorial process is reported in the next section.

About 54 active participants gathered at TSPC2016, coming from Italy and other European countries (Serbia 7, Germany 2, Greece 1, Slovenia 1, Hungary 1). It featured 9 talks and 45 posters. The book of proceedings includes written reports of all talks, and 40 out of 45 posters. Several areas of cognitive science were covered, including: perception (talks 4, 6, 8; posters 4, 5, 17, 24, 27, 29, 36); mindfulness (talk 1); action and perception (talk 6; posters 4, 19, 22, 30, 34); attention (posters 7, 29); memory (talk 3, 7; posters); learning (poster 17); development (posters 14, 23, 25, 31, 33); language (poster 13, 39); problem solving and reasoning (poster 20); personality (posters 11, 18, 25); decision-

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making (poster 20); concepts and categorization (talks 2; poster 4, 16, 33, 38, 39); social cognition (talk 4, 5; posters 6, 9, 40); animal cognition (talk 9; posters 1, 3, 8, 15, 36, 37); neuropsychology (poster 2, 10, 12, 22, 26, 28, 35, 38); rehabilitation (posters 22); developmental disorders (posters 2, 5, 10, 12); applied psychology (poster 7, 21, 28, 30, 32, 34); executive processes: monitoring, inhibitory control (posters 7, 14, 18, 23, 35);

In terms of disciplines, contributions included modelling, behavioral experiments with humans and animals, cognitive neuroscience, linguistics, philosophy, and vision.

We thank all authors who submitted an abstract to be included in the proceedings, and the reviewers who supported the editorial process with their fast and constructive reactions.

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Paolo Bernardis
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**How children tell a lie:
gender and school achievement differences in children's lie-telling**

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Keywords: deception, ability to lie, children, gender differences, school achievement

Research about children's lie-telling mainly include the so-called "temptation resistance paradigm". However, this procedure implicits only short, simple answers that do not require in-depth elaboration of lies. Aim of this study was to enforce a new procedure for measuring children's ability to lie and investigate gender and school achievement differences in children's lie telling. New procedure is designed to measure the degree of ability to lie, based on a person's persuasiveness while telling a story of false autobiographical events. The fulfillment of this task requires the ability to construct detailed, coherent and plausible content of the story in a short period of time and the ability to present this content as convincing in order to persuade others that the event really took place.

According to the reports of parents and teachers, boys tell lies more often than girls [1], so we expected that due to the greater experience they would be better at lie-telling than girls. In contrast, some studies showed that there are differences in performance of lies in favour of girls [2,3]. Also, we expected the correlation between ability to lie and school success, considering that learning as well as lying, requires high cognitive capacity.

First, children ($N = 48$, $M_{age} = 10.66$) balanced by gender, were given three loosely structured events for which was previously determined that they had not happened to them. Their task was to construct an event that did not happen and describe it as convincing as possible, to make someone believe that the event actually happened. Time for lie-telling was limited to 2 minutes and children were recorded with a camera. After collecting the video material, 15 independent psychology students watched the videos and assessed ability to lie of each child on a seven-point Likert scale. The assesing questionnaire was specially designed and it included three indicators of ability to lie: persuasiveness, richness of detail and uneasiness.

Interclass correlation coefficients were high: for persuasiveness 0.89, for richness of detail 0.98 and for uneasiness 0.90. Results showed no differences between boys and girls in persuasiveness ($t(46) = -0.818$, $p = 0.418$), nor in richness of detail ($t(46) = -0.558$, $p = 0.579$) or uneasiness ($t(46) = 0.316$, $p = 0.753$). However, children who have higher school achievement are estimated as more persuasive ($r = 0.41$, $p = 0.004$) in constructing and reporting false, pre-determined autobiographic stories and their stories were richer in detail ($r = 0.40$, $p = 0.004$).

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