

NEWSLETTER

The European Society for Cognitive Psychology



Introduction from the President

Nuria Sebastian Galle

Dear Members,

This is my first year as President of the Society. It is a great honor and responsibility to be the President of a society with such a long and brilliant history. First of all I want to take advantage of this opportunity to express the Society's gratitude to Axel Cleeremans and the members of the previous Committee for their commitment toward strengthening the Society. The Society has established itself as one of the strongest communities in Scientific Psychology in Europe. In the past we have created a series of awards and we fund a wide variety of activities. Our biannual congresses are of exceptional success. It would be easy to assume that just minor changes are needed to continue this successful path. However, this is not how I see it. The world around us has changed enormously in the last years and we need to adapt to it.

The first change coming to my mind is the world financial situation. This situation is having direct impact not only in the research our members can perform, but also on the capacity to attend scientific meetings and to pay membership fees. Much to our regret, we have lost some members because of shortage of funds. Nevertheless, taking into consideration the adverse circumstances we must consider good news the information provided by the Treasurer concerning our current membership figures (see next section in this newsletter).

A second major change having an impact in the life of our Society is the major influence of Internet and electronic communication across domains. In my view, it is urgent to introduce different changes in the way communication flows in the society to keep pace with our times.

The third and from my perspective most important change refers to the modifications taking place in the map of scientific societies in the recent times. On the one hand, a plethora of scientific

societies in neighboring domains has recently emerged. Many of these societies integrate scientists working in quite specific research topics and/or focused on the use of more brain-oriented techniques. On the other hand there are initiatives aimed at building bridges between different scientific societies within Psychology. In the summer of 2009 a meeting, organized under the auspices of the APS (Association of Psychological Sciences) took place in Paris. Two more meetings have taken place, in Utrecht and in Paris. Some of the topics discussed at these meetings turned around the need of tightening the relationships between the different European societies (here you can access a summary of the first meeting <http://www.psychologicalscience.org/observer/getArticle.cfm?id=2546>). Additionally, the EFPA (European Federation of Psychologists Associations) is also taking some steps in similar lines. One open question is how far the different societies are willing to go in this "integrative" effort.

When our society was created 25 years ago, its mission and role was clearly established. The current and future changes just described pose several challenges to our society that deserve some thinking and possibly action. In fact, some action has already taken place. One of the agreements we reached in the meetings with APS and other European societies was to facilitate the organization of "cross-society" symposia. In this sense, two very special symposia have been organized in our upcoming meeting. The first one a joint initiative of APS and ESCOP: "Where is embodiment going" (<http://www.bcbl.eu/events/escop2011/news/desde0/ver/1306921681/>) and the second one organized by the ESCAN (European Society of Cognitive and Affective Neuroscience): "Feedback Processing and the Brain" (<http://www.bcbl.eu/events/escop2011/news/desde0/ver/1306921523/>).

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The XVII Conference of ESCOP, to be held in Donostia is coming soon. As you can see further below in the report by the Organizer (Manuel Carreiras) the program looks extremely exciting and there is no doubt that it will be a major success. Furthermore, we will celebrate our 25th anniversary. At the Business Meeting to be held during the conference we will discuss the current state and future strategies for the society. I strongly encourage you to attend this meeting and to participate in the debates that will take place.

I look forward to seeing you in Donostia!

Núria Sebastián-Gallés, President

News from the Treasurer

Andrea Kiesel

The society is financially in a good shape. In 2010 expenses (67.721 €) exceeded receipts (40.845 €) because of the bi-annual payment of membership fees. The total balance amounted to 117.510 € at December 2010. In more detail, the society received membership fees 14.410 €, royalties for the Journal (now Journal of Cognitive Psychology) 20.608 €, a refund from the Krakov conference 2.500 € and interests. In 2010 the society spent 20.000 € for the ESCOP summer school in Austria, 14.000 € for workshops, 5.750 € for the “Early career stimulus award” and 1.000 € for the “Early career publication award”. Further, the society spent 9.223 € for the Journal, 6.016 € for the bureau treasurer & secretary, 817 € for bank fee and internet domain, 1.600 € for the video interview of Alan Baddeley for the ESCOP museum, 1.945 € for a meeting in Rotterdam, 6.515 € for a meeting in Donostia, and 852 € for a meeting with APS in Paris.

In 2011 the receipts will exceed payments. Up to now, the society received membership fees 24.172 €, royalties 19.914 €, and interests. To support the ESCOP conference, we spent 9.000 €. Further, we spent 4.000 € for workshops and 1.000 € for the “Early career stimulus award”. Costs for the bureau treasurer & secretary were 3.801 € and for the Journal 10.478 €.

Taylor and Francis and the ESCOP society agreed on a new contract regarding the journal. From the financial perspective, this contract offers a fixed amount of royalties for the society for each year. Further, we now avoid sending money back and forth to Taylor and Francis (to pay for the journal for our members and to receive royalties).

Unfortunately, we lost some members recently. Currently, we are 463 ESCOP members (360 FM and 103 AM). We are happy that we gained 80 new members in 2011 – a warm welcome to you. And further, we are happy that 49 ESCOP members join the society since 1987, that is since the first hour of ESCOP.

News from the Editor-in-Chief of Journal of Cognitive Psychology

Janet van Hell

The year 2011 opened with a new name for the journal: *Journal of Cognitive Psychology*. I initiated to change the name of the journal from *European Journal of Cognitive Psychology* to *Journal of Cognitive Psychology* to reflect the long-standing fact that the journal's readership, contributions, and editorial board are not restricted to the European continent, but engage scholars from all continents.

The new name *Journal of Cognitive Psychology* better reflects the journal's true global and international scope beyond European borders. The aims, scientific scope and editorial policy of the journal remain unchanged. The *Journal of Cognitive Psychology (JCP)* continues to publish cutting-edge research and review papers, and the editorial team welcomes contributions from researchers around the world. The ‘scientific home’ of the journal remains the *European Society for Cognitive Psychology*, so the journal will maintain its European roots.

As of January 2011, *JCP* also grew a few centimeters. *JCP* was reformatted to a bigger US-A4 page size, and journal pages are now printed in double column-format. In 2009, the publisher had increased the number of issues from 6 to 8 as a means to decrease the backlog. To further decrease the backlog, the journal is now printed in double-column format on larger page size. Of course, *JCP* continues to publish the DOI-version of accepted papers online shortly after the authors have returned their page proofs, because fast publication is key to researchers. But the reformatting should further minimize the time lag between the advance online publication of a paper and its actual appearance in print.

The name change of the journal coincided with a huge increase in the number of papers submitted to *JCP*. Between January 1 and August 7 2011, *JCP* received 147 first submissions. By comparison, the number of first submissions in the same time window was 87 in 2010 (which was already the highest number in the journal's history). So in the first half-year under the new name *Journal of Cognitive Psychology*, the number of first submissions increased by about 70%. This high number of submissions implies that an increasing number of researchers consider the journal an important forum to disseminate their work. It also means that *JCP* can be highly selective and publish only papers of the highest quality.

The team of editors is still committed to a short turnaround time while maintaining a high quality review process. We do our best to oversee a review and decision-making process in which we invite experts from the editorial board and ad hoc reviewers to provide constructive and thoughtful reviews. The average turnaround time of manuscripts submitted in the first half-year of 2011 was 53 days.

In the late summer of 2011, a special issue guest-edited by Philip Allen, Mei-Ching Lien, and Eric Ruthruff, entitled *Cognition and emotion: Views from neuroscience and behavioral perspectives*, will appear. This special issue opens with an overview paper on neural systems involved in emotional/cognitive integration, followed by papers that cover individual domains of cognitive psychology (attention, perception, working memory, episodic long-term memory, and decision making) and how they are influenced by emotional processes. In 2012, a special issue entitled *Information-processing, affect, and psychopathology: A festschrift for Michael W. Eysenck* will be guest-edited by Nazanin Derakshan and Ernst Koster. This special issue will celebrate and honor the important contributions to the study of cognition of Michael Eysenck, who was the first editor of *European Journal of Cognitive Psychology*.

As of today, *JCP* invites researchers to submit a proposal for a special issue to be published in 2013. For example, organizers of symposia to be held at the 17th Meeting of the *European Society for Cognitive Psychology* in San Sebastian may consider submitting a proposal for a special issue. Special issues provide an excellent opportunity to summarize the state-of-the-art on a specific topic, exchange perspectives, and develop new theoretical approaches to

research questions. Proposals for a special issue should have a well-articulated unifying theme and should describe state-of-the-art, leading edge research on this theme. A special issue will typically include a review article of research in the area of focus, and empirical articles that report complementary lines of evidence, or contrasting research methodologies. Deadline for submission is October 15, 2011. For more information, see *JCP*'s website <http://www.tandf.co.uk/journals/pp/09541446.html>.

In closing, I would like to thank *JCP*'s excellent team of Associate Editors: Teresa Bajo (University of Granada, Spain), Linden Ball (Lancaster University, UK), Valérie Camos (Université de Fribourg, Switzerland), Andrew Conway (Princeton University, USA), Addie Johnson (University of Groningen, Netherlands), Mei-Ching Lien (Oregon State University, USA), Timo Mäntylä (Umeå University, Sweden), Manuel Perea (Universitat de València, Spain), Maxwell Roberts

(University of Essex, UK; on the board until June, 2011), and Klaus Rothermund (Friedrich-Schiller-Universität Jena, Germany). I sometimes knock on their door twice a week with a request to serve as action editor for a manuscript, and the typical response I get is 'sure, no problem' or 'seems like a very interesting study' – even the second time I knocked. In selecting the best manuscripts for publication, we are assisted by a top-notch Editorial Board and many ad hoc reviewers. I would like to thank the editorial board members as well as the ad hoc reviewers for their wisdom, expertise, and time. Their constructive insights are invaluable in helping *JCP* to publish high quality papers and to advance our wonderful field of Cognitive Psychology.

*Janet van Hell, Editor-in-Chief Journal of Cognitive Psychology
Pennsylvania State University*

News on XVII ESCoP Conference

Donostia - San Sebastián, Spain, September, 29th - October, 2nd, 2011

At this point, the Scientific Committee has reviewed proposals for symposia and abstracts submitted for talks and poster presentations. We have received almost 800 submissions this year, so it was not so easy for the Scientific Committee to review all the scientific submissions, accepting ones and rejecting others. We are preparing the Scientific Program for the conference, which will be published on the webpage in the coming weeks. In summary, we have accepted:

- 32 symposia, that include 171 talks
- 157 talks
- 361 posters

The ESCOP 2011 conference was initially planned for six parallel scientific sessions, but we finally decided to organize 7 parallel sessions, accepting more talks than initially expected.

Almost 800 people have already registered for the conference by now and it is expected that the ESCOP 2011 will be attended by more than 1.000 scientists, good news to celebrate the 25th anniversary of the society.

A special event will be organized to celebrate the ESCOP anniversary, called "**Pintxos on my mind: When gastronomy meets cognitive psychology**". Dana Small, from Yale University, will present a talk focused on cognitive the basis of taste and smell related to gastronomy. The event will be organized together with the Basque Culinary Center, a research center on gastronomy based in San Sebastián, with the special collaboration of Juan Mari Arzak, Andoni Aduriz and Eneko Atxa (chefs awarded numerous Michelin stars).

Useful information about the conference and tourism (i.e. tourist trips during and after the conference) is available on the conference website.

SUMMARY:

INVITED SPEAKERS

Cathy Price. *University College London, UK*
Robert Zatorre. *McGill University, Quebec, Canada*
The Broadbent lecture: *Randi Martin. Rice University. USA*
The Bertelson award: *Antonino Vallesi. SISSA. Italy*

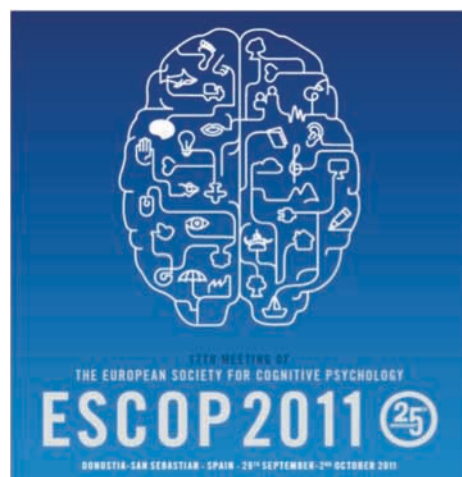
SPECIAL EVENT

"Pintxos on my mind: When gastronomy meets cognitive psychology"

Invited speaker: Dana Small. *Yale University, USA.*

Invited chefs: Andoni Aduriz, Eneko Atxa and Juan Mari Arzak

More info: www.bcbi.eu



Conference Reports

Workshop on “Crossmodal Action”

Report from the organizers

The Workshop on “Crossmodal Action” was held in Aachen, Germany, 1st-2nd October, 2010. The workshop was arranged in the “Super C”, a new and representative building on the main campus of the RWTH Aachen University in the heart of the traditional city center of Aachen. Accommodation of the speakers was located at the Ibis Marschiertor hotel, about 15 minutes walking distance from the conference venue. We had eight speakers (see photo) and about 30 participants altogether.

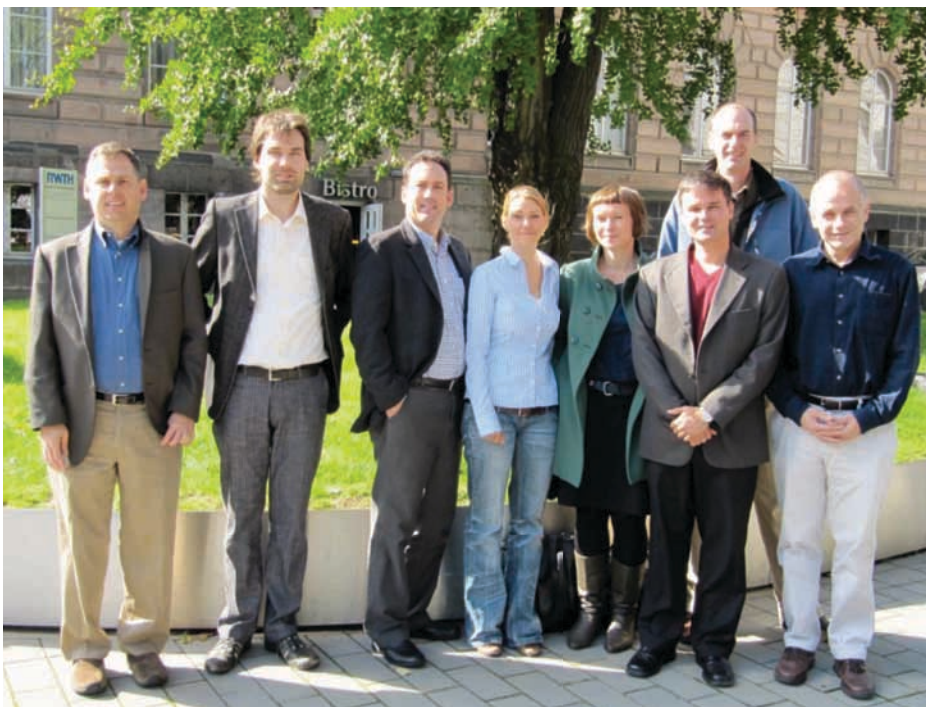
The core topic covered by the eight oral presentations was the role of input- and output-modalities in multitasking. While interacting with our environment, we constantly perform multiple tasks at a time, often involving different input and output modalities (i.e., crossmodal action). The talks of the workshop covered several aspects of crossmodal action, ranging from its cognitive principles and neurophysiological underpinnings to applied perspectives.

More specifically, Asher Cohen (Hebrew University of Jerusalem, Israel) started the scientific program by talking about strategies in dual-task performance and their implications for a structural view of multitasking. Lynn Huestegge (RWTH Aachen University, Germany) summarized research on the role of saccades in multitasking, highlighting the importance to view saccades as a response modality. Eliot Hazeltine (University of Iowa, US) talked about the role of working memory in explaining modality-specific patterns of dual-task costs and their decay over a long period of practice. Eric Schumacher (Georgia Institute of Technology, US)

discussed the issue of whether cognitive control is modality-specific by using a temporal flanker task. Paul Atchley (University of Kansas, US) highlighted applied aspects of crossmodal action in the context of driving a vehicle. Christine Stelzel (Charité, Berlin, Germany) explained neural mechanisms underlying the processing of stimulus-response modality pairings. Denise Stephan (RWTH Aachen University, Germany) introduced behavioral data on the role of input-output modality pairings in task switching settings, and Glenn Wylie (Kessler Foundation, New Jersey, US) concluded the talks by presenting distinct neurophysiological mechanisms for switching tasks between and within modalities. The workshop was concluded with a lively discussion of the most salient hot topics of the talks.

The participants seemed to enjoy their time in Aachen. As there were no parallel sessions and long coffee breaks, we had a lot of time for discussions. Two dinners also provided good opportunities to share knowledge and ideas between participants. The workshop ended with a guided tour highlighting the fascinating past of Aachen. The organizer – Lynn Huestegge of RWTH Aachen University and Eliot Hazeltine of the University of Iowa – want to thank the speakers and the discussants for their great contribution to the “Crossmodal Action” workshop. Many of the topics discussed will be covered by a forthcoming special issue of “Psychological Research” (guest eds.: Lynn Huestegge & Eliot Hazeltine) that will be published in 2011.

Lynn Huestegge



Conference Reports

6th International Workshop on Language Production

Report from the organizers

The 6th International Workshop on Language Production took place on Sept 2-4 in Edinburgh, Scotland. Eleven invited speakers from the US and Europe delivered hour long seminar-style talks to a crowd of over 100 participants. Additionally, over 70 posters were presented across 2 exciting poster sessions. The workshop attracted interest from researchers who travelled from Asia, Australia, all of Europe (East and West), the US and Canada. It was the largest workshop in the series so far and the most international in terms of representation. The workshop organizers are now engaged in organizing the publication of a special issue of *Language and Cognitive Processes* with papers invited from the workshop speakers. The special issue is slated for publication in 2012. The Seventh workshop in the series was announced at the workshop social dinner; it will be held in New York City in the summer of 2012.

The funding provided by ESCOP was invaluable in allowing the workshop organizers to cover the travel and accommodation costs for all speakers. It also allowed us to waive the registration fees for local students.

Full information about the workshop can be found at <http://www.personal.dundee.ac.uk/~amelinge/Workshop/index.html>

Further information about past workshops in the series are available at <http://www.lang-prod.org/>

Alissa Melinger

Anticipatory Behavior in Adaptive Learning Systems: Spatial Representations and Dynamic Interactions Workshop

Report from the organizers

On 21.2. and 22.2.2011 the workshop *Anticipatory Behavior in Adaptive Learning Systems (ABIALS)* was held in Bielefeld, Germany. About 50 scientists, mostly from Europe but also from as far as Japan, followed the invitation of the organizers Martin V. Butz, Oliver Herbolt (both University of Würzburg), Giovanni Pezzulo (Institute of Cognitive Sciences and Technologies, Rome), and Olivier Sigaud (Université Pierre et Marie Curie, Paris) to the event, which focused on the topic "Spatial Representations and Dynamic Interactions". During two days, cognitive psychologists, computer scientists, neuroscientists, and cognitive robotics researchers debated how spatial representations can develop and how these representations enable prediction, interaction with the environment, or improvement of skills.

A series of presentations covered the topic from different perspectives. On the neuroscience side, Keith L. Downing and Chris Miall discussed the neural basis of prediction. Martin V. Butz and Gregor Schöner outlined different dynamic models of spatial representations and their relationship to cognition, learning and the interaction with the environment. Whereas Claes von Hofsten's highlighted the importance of predictive mechanisms during child development, Thomas Schack showed that the structure of action representations is also a key to the acquisition of advanced sensorimotor skills. Oliver Herbolt,

Giovanni Pezzulo, and Ruud Meulenbroek reported new experimental data that provide a better understanding of the role of anticipation and motor simulation when interacting with objects, during learning, or during joint action tasks. Moreover, Christine Sutter discussed the interaction of multiple frames of references during tool use and Peter König informed about the involvement of overt attentional allocation for conscious perception. Finally, Helge Ritter's, Wolfram Schenck's, and Jun Tani's talks showed robotic implementations of predictive mechanisms and interaction routines. Besides the talks, the poster session was an additional highlight of the workshop. Here, presentations ranged from studies on learning to interact with the environment or predicting the actions of others to machine learning and robotic systems.

After two days of scientific debate, the attendees left the interdisciplinary workshop stimulated and inspired. Due to the positive resonance, the organizers discuss continuing the ABIALS workshop again as a two-day event in Bielefeld. The workshop was funded by the European Society for Cognitive Psychology, EuCogII, and the Center for Interdisciplinary Research in Bielefeld.

Oliver Herbolt

Conference Reports

Donostia Workshop on Neurobilingualism

Report from the organizers

Multilingualism plays an increasingly important role in society today. In Europe and throughout the world, many and different languages co-exist in the same population. In addition, globalization has promoted contacts between different languages and cultures that previously did not interact. Consequently, the world population is increasingly multilingual.

The goal of the **Donostia workshop on Neurobilingualism** (a successor of the Rovereto Workshop on Bilingualism, the Ghent Workshop on Bilingualism and the Bangor Workshop on Neurobilingualism) was to bridge cognitive and neural perspectives on multilingual language processing and to foster discussion and productive collaborations.

This workshop brought together multidisciplinary research on neurobilingualism, including psychological, linguistic, computational, neurobiological and formal perspectives.

The scientific program consisted of 6 keynote lectures, 2 discussions, 16 oral presentations and 2 poster sessions (88 posters were accepted). 170 international scientists attended the conference, coming mostly from Europe, but also from other countries as the USA, Canada or Taiwan.



Invited Speakers & Discussants:



Laura-Ann Petitto
University of Toronto, Canada
["Unmasking the myths of the bilingual brain: Surprising insights from across the bilingual lifespan"](#)



Agnes Kovacs
Hungarian Academy of Sciences, Hungary
["Acquiring two languages simultaneously: Cognitive enhancements in bilingual infants"](#)



Michael Dorman
Arizona State University, USA
["Neuro-plasticity in children and adults: Lessons from patients fit with cochlear implants"](#)



Jonathan Grainger
CNRS and University of Provence, France
["Learning words in a second language: From beginners to bilinguals"](#)



Douglas Davidson
Basque Center on Cognition, Brain and Language - BCBL, Spain
["Electrophysiological correlates of grammatical plasticity"](#)



Nuria Sebastian
Universitat Pompeu Fabra, Spain
["Individual differences in native and non-native speech perception"](#)



Guillaume Thierry
Bangor University, UK



Albert Costa
Universitat Pompeu Fabra, Spain

Prior to the conference, the BCBL organized an open talk for the general public that aimed to make available research done on the cognitive neuroscience of language. The talk was presented by Nuria Sebastián (Universitat Pompeu Fabra), who summarized innovative research done on bilingualism and children.

The venue combined with the sunny weather during the conference provided an excellent ambience to enjoy and relax during the breaks and lunches.

Manuel Carreiras



Conference Reports

Language and Recursion" conference

Report from the organizers

The "Language and Recursion" conference was held in the University of Mons, Belgium, from March 14 to 16, 2011.

In their 2002 paper "The faculty of language: what is it, who has it, and how did it evolve?" Hauser, Chomsky and Fitch suggested that the main difference between human and non human communication was due to the fact that humans were the only animals to master the "Faculty of Language in the Narrow sense", which implies the mastery of recursion. This position has been contested by many researchers and approved by others. The importance of recursion in human language might explain the role of Non Verbal Communication Devices in language revalidation. Nevertheless, the exact definition of recursion as it is used in language has not been précised.

The goal of the Mons conference is to gather researchers working on the influence of the recursion ability on the different aspects of the language faculty.

In order to achieve this aim and to favor discussions, the organizers adopted a format which is now unusual in international conferences. There were no parallel sessions. The invited speakers presented their papers by panels and each panel presentation was followed by a very long discussion session (at least one hour): this discussion concerned all the papers which had presented until that moment. This gave all participants ample time to confront their (sometimes very opposing) points of view, and to come back to previous presentations in order to establish links between them.

The participants were all hosted in the same hotel, which favored even more informal meetings and gave even more discussion time during breakfast, lunch, and dinner. There was even ample time to discuss, at night, in the hotel bar (drinks provided by the organizing committee to favor long discussions)!!!

Besides the speakers we also had about 60 doctoral students coming from many different countries: these students listened to the talks and took part to the discussion sessions.

The invited speakers came from many countries: Austria, Belgium, France, Germany, Great-Britain, Holland, New Zealand and the USA.

There were 6 panel sessions:

- Non Verbal Communication Devices, language acquisition and recursive exercises (Lefebvre, Lowenthal and Wautié [with Fortemps])
- Where is recursion in our language? (Fitch, Frath, Friederici and Gervain)
- Recursion and consciousness : origin in man and ape (Corballis, Demolin, and Lemasson [with Zuberbühler])
- Recursion, pragmatics and grammar (Jacquet-Andrieu, Fong, Freidin and Levinson)
- Connectionism, AI and consciousness (Cleermans, Dienès [with Rohrmeier and Quiang Fu], Dubois and Vergauwen
- A last panel was devoted to "other communications" concerning hyperpriming in normal aging (Stefaniak [with Meulemans and Willems], Neuroplasticity in a clinical perspective (Paquier) and visual recursion (Martins)

The conference major aim was to reconcile all the researchers concerned by language and recursion, and also to let them agree on one single definition of recursion. As could be expected, this aim was not completely reached, but many new very interesting research orientations were evoked and developed during the long discussion periods.

More information and pictures: <http://scoglab.umons.ac.be/langrec2011/>

Francis Lowenthal

Research Report

How does reading experience shape letter processing? Behavioral and electrophysiological evidence from preschoolers and novel readers

by Maria Dimitropoulou,

2010 Early Career Stimulus recipient

Reading and understanding the meaning of the sentences constituting the present research report is only possible because you have previously correctly accessed the identity of the individual letters comprising each word. Though, the recognition of letters seems to be taking place in an effortless way, this process could not be accomplished if readers were not previously able to distinguish for instance, between the similar looking “o” and “c”, to identify as the same the visually dissimilar “r” and “R” or “g” and “G”, and to effectively merge the outcomes of these processes. In fact, electrophysiological studies have shown that in experienced readers these two processes: a detailed featural decomposition of letters and the subsequent mapping onto their corresponding abstract letter identities, though in close temporal proximity (within the first 200ms since presentation), take place at different moments in time (e.g., Petit et al., 2006; see Grainger et al., 2008, for review). Nevertheless, research so far has not examined the extent to which novel readers process letters in a comparable way. By combining behavioral and electrophysiological measures, (Event Related Potentials, ERPs) in the present study, we aimed at testing whether visual similarity among letters and their abstract identities influence letter processing at the earliest stages of reading acquisition. Moreover, by testing pre-readers and first-graders we examined how systematic exposure to print modulates letter processing.

5 year-old kinder garden students who had been taught all the uppercase and lowercase letters of the Spanish alphabet and first-graders, completing their reading training, were tested in two same/different perceptual identification experiments. Both groups of children had to indicate as fast as possible through a button press whether two subsequently presented letter pairs (a probe and a target letter pair) were identical (e.g., cS-cS) or not (e.g., cS-cA). In both experiments the experimental manipulations were included in the “different” letter pairs, which differed only in one of their letters. In Experiment 1, aimed to examine the impact of visual letter similarity on letter processing, these critical letters were either visually similar (e.g., ca-cc) or visually dissimilar (e.g., ca-ck) to each other. In Experiment 2, aimed to investigate how having or not a shared abstract letter identity influences letter perception, the critical different letters were all visually dissimilar to each other but in half of the cases they were the upper and lowercase version of the same letter (e.g., ca-cA), and in half of the trials they were different upper and lowercase letters (e.g., ca-cU). In order to identify the neural correlates and the time course of letter perception at the earliest stages of reading acquisition ERPs, time-locked to the target letter pairs, were recorded while participants were performing the task.

Behavioral results showed that increased exposure to print had an overall effect on the children’s performance: in both experiments first-graders performed the task faster than preschoolers. More importantly, in the critical trials requiring a different response, we observed that both groups tended to erroneously judge as

identical letter-pairs differing by one-similar looking same-case letter (e.g., ca-cc; a visual similarity cost, Exp. 1) as well as pairs only differing by an upper and a lowercase version of the same letter (e.g., ca-cA; an abstract letter identity cost, Exp. 2).

However, the abstract letter identity cost was significantly greater for first-graders than for pre-readers, suggesting that as a function of increased exposure to print, letter identities become progressively activated in a more automatic way.

ERPs closely mimicked the pattern of behavioral effects obtained. Larger waveform differences were found for first-graders than for pre-readers as a result of the abstract letter identity manipulation (Exp. 2). On the contrary, the visual similarity manipulation had a larger impact on the preschoolers’ letter processing: larger waveform differences were found for this group than for first-graders when similar looking letter processing was compared to dissimilar looking letter processing.

These findings provide online evidence on how the sub-processes supporting letter recognition take place at the two most critical phases of reading acquisition: i) when children are first presented with written input in the form of single, out of a meaningful context, letters (pre-readers) and ii) when the letters are first systematically presented within a reading context (first-graders). Although neuroimaging data indicated that it is increased exposure to print that leads to a fine tuning to letters (see Schlaggar & McCandliss, 2007, for review), behavioral studies to date had mostly provided support in favor of an all or none acquisition of abstract letter identity since no behavioral differences had been so far reported when novel and expert readers letter identity processing was compared (Kaye et al., 1981). Using a perceptual match same/different task we were able to track a gradual increase in the interference caused by the automatic activation of letter identities during letter perception, observed as a matter of just one year of additional exposure to reading.

As these results showed, the critical shift in the nature of the exposure to letters taking place in the first year of primary school: from out of context letter processing in kindergarden to reading for comprehension in first grade, is so notable that it leads to a critical cognitive shift. In kindergarden children letter recognition is mostly driven by a perceptual featural decomposition of letters while in first-grade children letter processing mainly relies on the highly automatic and unintentional activation of abstract letter identities, even when this is harmful for the purposes of the task at hand.

References

- Grainger, J., Rey, A., & Dufau, S. (2008). Letter perception: from pixels to pandemonium. *Trends in Cognitive Sciences*, 12(10), 381-387.
- Kaye, D.B., Brown, S.W., Post, T.A., & Plude, D. (1981). The development of letter processing efficiency. *Memory & Cognition*, 9(4), 378-388.
- Petit, J.P., Midgley, K.J., Holcomb, P.J., & Grainger, J. (2006). On the time-course of letter perception: A masked priming ERP investigation. *Psychonomic Bulletin & Review*, 13(4), 674-681.
- Schlaggar, B.L., & McCandliss, B.D. (2007). Development of neural systems for reading. *Annual Review of Neuroscience*, 30, 475-503.

Research Report

Flexibility of the non-verbal SNARC effect in adults*by Katarzyna Patro,**2010 Early Career Stimulus recipient*

I was fortunate to receive the ESCoP Early Career Stimulus at the beginning of my PhD studies, which helped me to make the first step in pursuing a doctoral project on number-space processing. Thanks to the grant, I carried out a series of experiments, and attended the Twenty-ninth European Workshop on Cognitive Neuropsychology in Bressanone, where the initial results were presented.

The aim of my project is to resolve the problem on how far spatial-numerical associations may be determined by cultural activities. I focus on examining the SNARC effect (shorter RTs to smaller numbers on the left side and to larger numbers on the right side) during non-verbal quantity processing. The effect is well explored for symbolic stimuli (Arabic digits, number words), but examples of its non-symbolic form are scarce in the literature. The idea of studying SNARC during non-verbal quantity processing developed during my work as a master student under supervision of dr. Maciej Haman. We conducted an experiment that showed the presence of a SNARC-like quantity-space interaction in preliterate and pre-counting preschoolers. These results seem to be interesting in the face of existing data indicating that symbolic SNARC is dependent on cultural activities learned in the course of formal education, such as reading scripts or organizing Arabic digits (Dehaene et al., 1993; Zebian, 2005; Shaki et al., 2009). Therefore, I am currently trying to figure out whether similar mechanisms underlie the process of forming non-symbolic and symbolic SNARC in adults.

As studies show, classical symbolic SNARC in adults is not stable, but flexible, and strongly susceptible to short-term changes in reading direction (Shaki & Fischer, 2008) or sequences of numerals (Bächtold, Baumüller & Brugger, 1998; Fischer, Mills & Shaki, 2009). It is also evoked automatically, even if processing of numerical value is not required by instruction. Therefore, in a current series of experiments, I use a task in which participants classify the sets of elements on the basis of their color, so that the quantity is processed automatically. An influence of cultural activities (reading, organizing numerals) is manipulated as well. The results, in general, confirm the hypothesis that non-symbolic SNARC is very flexible and susceptible to cultural manipulations, so, at least in that respect, it is similar to its symbolic counterpart. However, the pattern of changes within the effect leads to another conclusion. Left-to-right SNARC emerged only when it was preceded by both left-to-right reading and a number bisection task (indicating the middle value of a given number range). Neither a reading task alone, nor a number bisection allowed to observe the effect. But the most interesting results were observed in a condition without any manipulation, when even instruction was presented orally. In that condition, SNARC emerged from right to left (reactions to smaller sets were faster with the right hand, and to larger sets with the left hand). It seems that right-to-left direction is default for a non-verbal SNARC, and only intensive left-to-right manipulations while reading and processing numerical symbols can reverse this primary quantity-space association.

These results point to the importance of extending the SNARC research into the domain of the non-verbal numerical competences. Such studies could tell us more about the mechanisms that activate directional code during number processing.

ESCoP News

Committee

ESCoP Committee

The Executive Committee has co-opted a new member - **Marilou Vandierendonck**.

Awards

National Franqui Chair

It is our pleasure to inform, that **Prof Dr Jonathan Grainger** (*Université d'Aix-Marseille*), the former member of ESCoP Executive Committee and 15th ESCoP Conference main organizer, has been awarded with the prestigious National Franqui Chair Award at University of Gent. Congratulations!

ESCoP Early Career Publication Award

ESCOP Early Career Publication Award 2010 goes to **Markus Janczyk** (*University of Würzburg*) for the paper entitled: Grasping for parsimony: Do some motor actions escape dorsal processing? (*Neuropsychologia*, 48, 2010, 3405-3415)

This paper reports a series of four experiments on visual guidance of grasping actions. The results challenge a standard, often implicit, assumption of the Goodale and Milner theory of the control of action by visual stimuli: that the dorsal route is used specifically for the guidance of natural/skilled/practiced actions. The experiments measure reaction and movement time to pick up a rod varying in width (relevant) and length (irrelevant) as the second task in a PRP dual-task paradigm. They show that reaching with the non-dominant hand, reaching with a novel and awkward grip, and reaching with a novel scissor-tongs tool are all indistinguishable from normal reaching with the dominant hand with respect to two criteria: they show freedom from Garner-interference from irrelevant variation in the target's length (unlike perceptual judgements of width), and they show a similar PRP effect.

The experiments, while technically sophisticated, are simple in concept and ingeniously exploit chronometric behavioural effects as criteria for dorsal control of grasping. The paper is clearly written, and presents in a systematic and balanced way the background to and rationale for the experiments, and the provocative implications of the findings for the "standard" theory of visual guidance of action.

ESCoP Early Career Stimulus

The ESCoP Early Career Stimulus Award was received by **Olga Puccioni** (*Cognitive Neuroscience Sector, International School for Advanced Studies, Trieste, Italy*) for the project: Do residual skills in healthy older adults influence cognitive control? and **Péter Pajkossy** (*Department of Cognitive Science, Budapest University of Technology and Economics, Hungary*) for the project: The role of stimulus-independent cognition in repetitive thinking

ESCoP News

Call for papers

**Call for Special Issue Proposals,
Journal of Cognitive Psychology,**
Deadline: October 15, 2011

The Journal of Cognitive Psychology (*JCP*) invites proposals for a special issue on a topic related to the focus of *JCP*: all areas of research in cognitive psychology, including research that adopts a neuroscience approach to human functioning are appropriate. Special issues provide an excellent opportunity to summarize the state-of-the-art on a specific topic, exchange perspectives, and develop new theoretical approaches to research questions. *JCP* publishes one special issue each year. This open call invites researchers to submit a proposal for a special issue to be published in 2013.

Proposals for a special issue should have a well-articulated unifying theme and should describe state-of-the-art, leading edge research on this theme. A special issue will typically include a review article of research in the area of focus, and empirical articles that report complementary lines of evidence, or contrasting research methodologies.

Each proposal should consist of the following:

1. Name and affiliation of Guest Editor(s).
2. Concise CV and list of major publications of Guest Editor(s).
3. A provisional title for the special issue.
4. A general summary (max. 1 page) describing the general focus and aims of the special issue.
5. A list of authors that have agreed to submit a contribution to the special issue (i.e., a list of names with affiliations) as well as an overview of the titles of their contributions (and preferably preliminary abstracts).
6. A motivation why *JCP* should publish this special issue (max. 1 page).

The selection of the special issue proposals will be made by the Editor-in-Chief and the Associate Editors. As part of the evaluation process, the editorial team may ask experts on the special issue topic to evaluate the proposal. We anticipate making a decision and notifying the authors no later than one month after the submission deadline. Criteria for identifying the proposal of the highest quality include: 1) novelty and timeliness of the topic; 2) the extent to which the special issue will advance our understanding and break new ground for future research; 3) coherence of the proposed papers and thoroughness of the proposal; 4) relevance for the journal's readership.

Papers submitted for a special issue are subject to *JCP*'s standard rigorous peer review procedure. A special issue contains about 160 printed journal pages. A rough rule of thumb is that 3 manuscript pages (including all pages of figures/tables/references will make 2 printed pages. This assumes that the manuscript pages are A4, double spaced and printed in a typeface that gives an average of 270-300 words per page.

Special issue proposals can be submitted to the Editor-in-Chief Janet van Hell (jgv3@psu.edu)

Submission deadline: October 15, 2011

Conferences & Workshops

**Varieties of Representation: Kazimierz
Naturalist Workshop 2011**
Kazimierz Dolny, Poland
5-9 September 2011

The notion of representation is essential for the project of naturalizing the mind and meaning. One of the key issues regarding representation concerns the possible varieties of representation: what are various ways of representing? Are mental representations propositional or image-based, connectionist, analog or digital? How can one answer these questions in the case of natural cognitive systems? What consequences does a pluralist attitude to representation have for claims that animals and even plants are capable of representing?

KNEW'11 is being organised by Marcin Milkowski (PAN, OBF) and Konrad Talmont-Kaminski (UMCS, OBF) with financial assistance from the Philosophy and Sociology Faculty of Marie Curie-Skłodowska University as well as the Centre for Philosophical Research.

Workshop webpage: <http://www.obf.edu.pl/content/blogcategory/17/42/lang/en/>

ESCOP News

7th annual meeting Workshop on Bilingualism: Neurolinguistic and Psycholinguistic Perspectives, Aix-en-Provence

Aix-en-Provence, France
12-14 September 2011

The Aix-en-Provence Bilingual Workshop is the 7th annual meeting of confirmed and aspiring research scientists interested in the workings of the bilingual brain.

The workshop has grown from a small yet international gathering to an established annual meeting, attracting researchers from all over Europe and North America, as well as a handful from Asia. We await our colleagues from down under!

We are looking forward to a stimulating conference once again this year.

Please visit <http://aunc.lpl.univ-aix.fr/~bilingualworkshop/BLWKSHP.php>

Embodied Language and the Motor System

New College, Oxford, UK,
26-28 September 2011

The meeting will focus on the neural approach to language embodiment and aim to bring together those whose work in linguistics, in neuroscience or in philosophy (Merleau-Ponty's account of word embodiment) directly or indirectly bears on this. As background for this approach reference is made to Neurophilosophy by Patricia Churchland and to evolutionary neurophysiological aspects considered at the multidisciplinary conference organised by the Language Origins Society (with others) as part of a NATO/ASI series. The meeting will be under the auspices of the Language Origins Society and the European Society for the Study of Cognitive Systems

Website: New College and Embodied Language www.newcollegeembodiedlanguage.com

6th Annual South East European Doctoral Student Conference

Thessaloniki, Greece
19-20 September 2011

Building on the success of the five previous doctoral conferences which each attracted over 100 papers from countries all over the SE European region and beyond, we are pleased to announce the organisation of the 6th SEERC Doctoral conference. The aim of the conference is to further facilitate the exchange of knowledge between young researchers and to consolidate the established network of scholars currently undertaking research in South East Europe.

Subject of interest within psychology - Smoking Interventions at School and in the Workplace, Alcohol and Drug Use and Abuse, Attention and Human Performance, Cognitive Neuroscience, Cognitive Development in Typical and Atypical Populations, Quality of Life in Chronically-ill and Healthy Populations, Emotionality and Well-Being, Intervention with Populations with Special Needs, Counselling and Psychology)

Website: <http://www.seerc.org/dsc2011/>

Fourth International Conference of Students of Systematic Musicology

Cologne, Germany October 5-7, 2011

SysMus11 invites PhD and advanced Master students of systematic musicology and related fields of music research to present their ongoing work and to participate in the positioning of systematic and cognitive musicology in a dynamically changing scientific context.

webpage: <https://sites.google.com/site/sysmus11/>

Tagung experimentell arbeitender Psychologen 2012

Mannheim, Germany,
1-4 April 2012

The "TeaP" is one of the largest psychological research conferences in the German-speaking countries. It has a long-standing tradition reaching back to 1959. There are usually more than 500 contributions, organized in symposia, individual talks in thematic sessions, and poster sessions. "TeaP" is an abbreviation for "Tagung experimentell arbeitender Psychologen". This means that the common denominator of the research presented here is the experimental method in behavioral research. Contributions are welcome from various psychological subdisciplines using or improving the experimental method, such as Cognitive Psychology, Social Psychology, Methodology etc.

The next TeaP will take place in Mannheim, April 1-4 2012. For the first time, the official language of the TeaP will be English, primarily to enable colleagues from other European countries to participate.

Online submission for contributions will be **open from September 15th 2011**. The submission deadline for **symposia is October 15th 2011, individual papers can be submitted until November 15th**. The program committee will decide on the acceptance of contributions until December 20th, 2011.

More information can be found at www.teap.de.

The European Society for Cognitive Psychology

Calls for Awards and Funding

ESCOP Activity Funding

deadline:

September, 1st 2011

ESCOP is offering partial funding for activities such as meetings, colloquia, etc. that are organized by ESCOP members, for an amount of up to 2000 Euro. Proposals should be sent by email to the ESCOP Secretary, [Michal Wierzchon](#). Deadlines are 1st March, 1st June, 1st September, and 1st December of each year. The committee will take a maximum of two months from the date of submission to evaluate the proposal and communicate the final decision.

Proposals should not exceed 1500 words and should specify:

- 1 Place and Date of activity
- 2 Organisers
- 3 Topic of the activity, including relevance for ESCOP
- 4 Program, including names of speakers
- 5 Intended audience (number of people, students or senior researchers, from which field)
- 6 Detailed budget

ESCOP Early Career Stimulus

deadline:

December, 1st 2011

The ESCOP Early Career Stimulus is a grant of €1000 aimed at supporting European graduate students. Multiple such grants will be awarded each year to support the following career development activities:

- 1 specific research projects (e.g., completing an experiment)
- 2 active participation to conferences or workshops
- 3 short-term visits to another lab in a different country

The grants will preferentially (but not exclusively) be awarded to students from Eastern European countries. PhD students from all areas of cognitive psychology are invited to apply.

Interested applicants should send a short presentation of their project in .pdf format. The document should contain the following:

- 1 a two-page scientific description of the project
- 2 an itemized budget indicating clearly how the money will be spent
- 3 a support letter by an ESCOP full member
- 4 the applicant's CV

Materials should be sent to the ESCOP secretary, [Michal Wierzchon](#).

Deadlines are December 1st and June 1st of each year. A jury of three members nominated by the ESCOP Committee will examine the proposals within two months of the deadline.

ESCOP NEWSLETTER

Newsletter of the European Society for the Cognitive Psychology

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