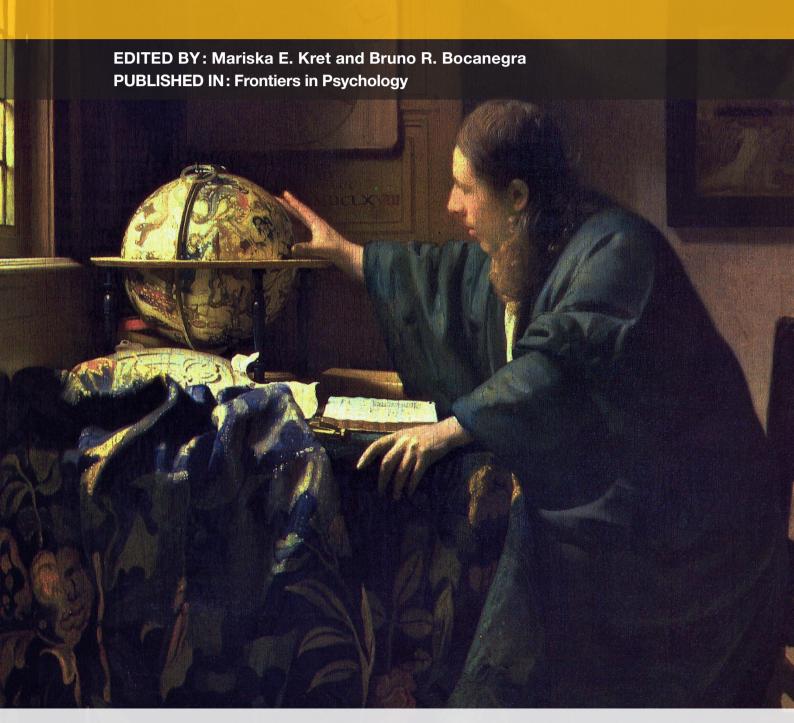
ADAPTIVE HOT COGNITION: HOW EMOTION DRIVES INFORMATION PROCESSING AND COGNITION STEERS AFFECTIVE PROCESSING







Frontiers Copyright Statement

© Copyright 2007-2017 Frontiers Media SA. All rights reserved.

All content included on this site, such as text, graphics, logos, button icons, images, video/audio clips, downloads, data compilations and software, is the property of or is licensed to Frontiers Media SA ("Frontiers") or its licensees and/or subcontractors. The copyright in the text of individual articles is the property of their respective authors, subject to a license granted to Frontiers.

The compilation of articles constituting this e-book, wherever published, as well as the compilation of all other content on this site, is the exclusive property of Frontiers. For the conditions for downloading and copying of e-books from Frontiers' website, please see the Terms for Website Use. If purchasing Frontiers e-books from other websites or sources, the conditions of the website concerned apply.

Images and graphics not forming part of user-contributed materials may not be downloaded or copied without permission.

Individual articles may be downloaded and reproduced in accordance with the principles of the CC-BY licence subject to any copyright or other notices. They may not be re-sold as an e-book.

As author or other contributor you grant a CC-BY licence to others to reproduce your articles, including any graphics and third-party materials supplied by you, in accordance with Conditions for Website Use and subject to any copyright notices which you include in connection with your articles and materials.

All copyright, and all rights therein, are protected by national and international copyright laws.

The above represents a summary only. For the full conditions see the Conditions for Authors and the Conditions for Website Use.

ISSN 1664-8714 ISBN 978-2-88945-165-4 DOI 10.3389/978-2-88945-165-4

About Frontiers

Frontiers is more than just an open-access publisher of scholarly articles: it is a pioneering approach to the world of academia, radically improving the way scholarly research is managed. The grand vision of Frontiers is a world where all people have an equal opportunity to seek, share and generate knowledge. Frontiers provides immediate and permanent online open access to all its publications, but this alone is not enough to realize our grand goals.

Frontiers Journal Series

The Frontiers Journal Series is a multi-tier and interdisciplinary set of open-access, online journals, promising a paradigm shift from the current review, selection and dissemination processes in academic publishing. All Frontiers journals are driven by researchers for researchers; therefore, they constitute a service to the scholarly community. At the same time, the Frontiers Journal Series operates on a revolutionary invention, the tiered publishing system, initially addressing specific communities of scholars, and gradually climbing up to broader public understanding, thus serving the interests of the lay society, too.

Dedication to Quality

Each Frontiers article is a landmark of the highest quality, thanks to genuinely collaborative interactions between authors and review editors, who include some of the world's best academicians. Research must be certified by peers before entering a stream of knowledge that may eventually reach the public - and shape society; therefore, Frontiers only applies the most rigorous and unbiased reviews.

Frontiers revolutionizes research publishing by freely delivering the most outstanding research, evaluated with no bias from both the academic and social point of view. By applying the most advanced information technologies, Frontiers is catapulting scholarly publishing into a new generation.

What are Frontiers Research Topics?

Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: **researchtopics@frontiersin.org**

ADAPTIVE HOT COGNITION: HOW EMOTION DRIVES INFORMATION PROCESSING AND COGNITION STEERS AFFECTIVE PROCESSING

Topic Editors:

Mariska E. Kret, Leiden University & Leiden Institute for Brain and Cognition, Netherlands Bruno R. Bocanegra, Leiden University & Leiden Institute for Brain and Cognition, Netherlands



Cover image: "The Astronomer" by Johannes Vermeer

Influential theories have argued that affective processing is fundamentally different from cognitive processing. Others have suggested that theoretical boundaries between affective and cognitive processing are artificial and inherently problematic. Over recent years, different positions on these issues have fueled many empirical studies investigating the mechanisms underlying cognitive and affective processing. Where and on what basis should we draw the line between cognition and emotion? Are there fundamental distinctions to be made between the way emotion influences cognition and cognition influences emotion? How does the reciprocal interaction between emotion and cognition lead to adaptive behavior? This Research Topic explores the nature of the reciprocal interaction between emotion and cognition from a functional perspective.

Citation: Kret, M. E., Bocanegra, B. R., eds. (2017). Adaptive Hot Cognition: How Emotion Drives Information Processing and Cognition Steers Affective Processing. Lausanne: Frontiers Media. doi: 10.3389/978-2-88945-165-4

Table of Contents

05	Editorial: Adaptive Hot Cognition: How Emotion Drives Information Processing
	and Cognition Steers Affective Processing

Mariska E. Kret and Bruno R. Bocanegra

09 Embodied Resistance to Persuasion in Advertising

Peter Lewinski, Marieke L. Fransen and Ed S. Tan

21 Decomposing Self-Control: Individual Differences in Goal Pursuit Despite Interfering Aversion, Temptation, and Distraction

Rosa Steimke, Christine Stelzel, Robert Gaschler, Marcus Rothkirch, Vera U. Ludwig, Lena M. Paschke, Ima Trempler, Norbert Kathmann, Thomas Goschke and Henrik Walter

37 Competitive Game Play Attenuates Self-Other Integration during Joint Task Performance

Margit I. Ruissen and Ellen R. A. de Bruijn

- **44** Corrigendum: Arousal and exposure duration affect forward step initiation

 Daniëlle Bouman, John F. Stins and Peter J. Beek
- Information Use Differences in Hot and Cold Risk Processing: When Does Information About Probability Count in the Columbia Card Task?

 Łukasz Markiewicz and Elżbieta Kubińska
- 56 Arousal and exposure duration affect forward step initiation
 Daniëlle Bouman, John F. Stins and Peter J. Beek
- 66 Distinct effects of contrast and color on subjective rating of fearfulness
 Zhengang Lu, Bingbing Guo, Anne Boguslavsky, Marcus Cappiello, Weiwei Zhang
 and Ming Meng
- **Modulation of executive attention by threat stimulus in test-anxious students**Huan Zhang, Renlai Zhou and Jilin Zou
- 88 Anger fosters action. Fast responses in a motor task involving approach movements toward angry faces and bodies

Josje M. de Valk, Jasper G. Wijnen and Mariska E. Kret

- **The perception of time while perceiving dynamic emotional faces**Wang On Li and Kenneth S. L. Yuen
- **106** Encoding of goal-relevant stimuli is strengthened by emotional arousal in memory
 Tae-Ho Lee, Steven G. Greening and Mara Mather
- 113 Tryptophan supplementation and the response to unfairness in healthy volunteers

Hilâl Cerit, Rachel J. Schuur, Ellen R. A. de Bruijn and Willem Van der Does

119 Executive and semantic processes in reappraisal of negative stimuli: insights from a meta-analysis of neuroimaging studies

Irene Messina, Simone Bianco, Marco Sambin and Roberto Viviani

132 Erratum on: Follow the heart or the head? The interactive influence model of emotion and cognition

Frontiers Production Office

133 Emotional expressions beyond facial muscle actions. A call for studying autonomic signals and their impact on social perception

Mariska E. Kret

143 Follow the heart or the head? The interactive influence model of emotion and cognition

Jiavi Luo and Rongiun Yu

157 Transcutaneous Vagus Nerve Stimulation (tVNS) does not increase prosocial behavior in Cyberball

Roberta Sellaro, Laura Steenbergen, Bart Verkuil, Marinus H. van IJzendoorn and Lorenza S. Colzato

- 164 Corrigendum: A question of scent: lavender aroma promotes interpersonal trust Roberta Sellaro, Wilco W. van Dijk, Claudia Rossi Paccani, Bernhard Hommel and Lorenza S. Colzato
- 165 A question of scent: lavender aroma promotes interpersonal trust
 Roberta Sellaro, Wilco W. van Dijk, Claudia Rossi Paccani, Bernhard Hommel
 and Lorenza S. Colzato
- 170 Tryptophan promotes charitable donating

Laura Steenbergen, Roberta Sellaro and Lorenza S. Colzato