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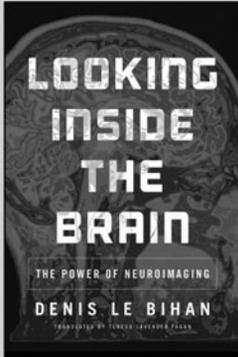
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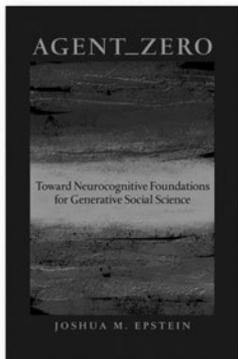
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Brain mechanisms of acoustic communication in humans and nonhuman primates: An evolutionary perspective

Hermann Ackermann, Steffen R. Hage, and Wolfram Ziegler

To appear in upcoming issues (2015)

Memory reconsolidation, emotional arousal, and the process of change in psychotherapy: New insights from brain science

Richard D. Lane, Lee Ryan, Lynn Nadel, University of Arizona, Tucson, and Leslie Greenberg, York University

The core idea of the target article is that therapeutic change in a variety of modalities, including behavioral therapy, cognitive-behavioral therapy, emotion-focused therapy, and psychodynamic therapy, results from the updating of prior emotional memories through a process of reconsolidation that incorporates new emotional experiences. We present an integrative memory model with three interactive components: autobiographical (event) memories, semantic structures, and emotional responses. We propose that the essential ingredients of therapeutic change include: (1) reactivating old memories; (2) engaging in new emotional experiences that are incorporated into those reactivated memories via the process of reconsolidation; and (3) reinforcing the integrative memory structure by practicing a new way of behaving and experiencing the world in a variety of contexts. The implications of this new, neurobiologically grounded synthesis for research, clinical practice, and teaching are discussed.

With commentary from G Ainslie; O Benga, B Neagota & I Benga; CR Brewin; F De Brigard & E Hanna; S Diekelmann & C Forcato; B Ecker, L Hulley & R Ticic; NA Kimbrel, EC Meyer & JC Beckham; SB Klein & HJ Markowitsch; KS LaBar; I Liberzon & A Javanbakht; S Ullswyll; F Mancini & A Gangemi; TC Mann, J Cone & MJ Ferguson; T Marks-Tarlow & J Panksepp; C Montemayor; N Moyal, N Cohen, A Henik & GE Anhalt; D Ortu; A Pascual-Leone & J Pascual-Leone; L Patihis; VF Reyna & Y Landa; R Roache; M Solms; R Spanagel & M Bohus; A Staniloiu & AE Zaretsky; M Stein, KB Rohde & K Henke; U von Hecker, DN McIntosh & G Sedek; WJ Whelton

How to learn about teaching: An evolutionary framework for the study of teaching behavior in humans and other animals

Michelle Ann Kline, University of California, Los Angeles

The human species is more reliant on cultural adaptation than any other species, but it is unclear how faithful transmission of cultural adaptations happens. One possibility is that teaching facilitates faithful transmission by affecting learner inferences. However, there is wide disagreement about how to define teaching and how to interpret comparative empirical evidence. These disputes are based on a number of deep-rooted theoretical and definitional differences between fields. To reconcile these, I review the three major approaches to the study of teaching: mentalistic, culture-based, and functionalist – and propose a new framework that differentiates teaching types according to the specific learning problems each type solves. I apply this framework to empirical evidence on teaching in humans and other animals, and discuss implications for the study of the evolution of teaching, including the roles of cognitive constraints and cooperation. Finally, I propose an explanation for why some types of teaching are uniquely human and discuss new directions for research.

With commentary from M Abrams; A Badets & F Osiurak; SR Beck; T Caro; L Chouinard-Thuly & SM Reader; KH Corriveau; LG Dean & RL Kendal; Y Eshchar & D Frigaszy; L Fogarty; P Gärdenfors & A Högberg; M Hernik & G Gergely; J Jaquet; AM Johnston, K McAuliffe & IR Santos; M Koenig; AC Kruger; DF Lancy; L Marin; R Moore & C Tennie; CP Müller; M Nielsen & C Shipton; E Palagi, R Stanyon & E Demuru; E Pasquinelli, T Zalla, K Gvodzic, C Potier-Watkins & M Piazza; M Paulus, S Kim & B Sodian; A Poddiakov; LG Rapaport; A Ravignani & R Sonnweber; AR Ridley & BJ Ashton; B Rogoff; S Ronfard & PL Harris; MH Scheel, HL Shaw & RA Gardner; TC Scott-Phillips & D Sperber; MG Shafto & CM Seifert; A Sharkey; PE Smaldino & EK Newton; S Strauss, M Ziv & D Frye; D Tatone & G Csibra; A Thornton & NJ Raihani; A Torres-Garcia, HE Kim & JE Swain

Among the articles to appear in forthcoming issues of BBS:

R. D. Lane, L. Ryan, L. Nadel & L. Greenberg, "Memory reconsolidation, emotional arousal and the process of change in psychotherapy: New insights from brain science"

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L. Pessoa, "Précis of *The Cognitive-Emotional Brain*"

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