

ment and maintenance of anxiety that will assist in the creation of a comprehensive case formulation. There are a number of self-monitoring sheets and psychoeducation handouts for clients included in this section, as well as quick reference guides for use by clinicians to assist in assessment and the development of a client case formulation. An interesting addition to the assessment review is the emphasis on identifying factors that fall within the cognitive theory of anxiety irrespective of anxiety disorder diagnosis. For example, the authors include a list of questions that can be used in session to assist in the identification of external, internal, and cognitive triggers for anxiety. As such, although the final section of this book deals with cognitive treatment as it applies to specific disorders, the emphasis here is nevertheless placed on treating the underlying cognitive processes that contribute to the development and maintenance of a particular client's anxiety, rather than simply treating the disorder. As a complement to this, this second part of the book includes two chapters on the various cognitive and behavioural interventions that are generally used in cognitive therapy for anxiety. The authors again included a large number of handouts for clients and for clinicians, as well as sample therapist/patient dialogue to illustrate specific strategies. In keeping with the rest of the book, empirical evidence is presented substantiating the use of various interventions in addition to the descriptions of the practical applications of each strategy. Of particular interest to clinicians relatively new to cognitive therapy and its distinction from behaviour therapy is the description of how to conduct behavioural experiments (also called empirical hypothesis-testing). Sometimes confused with the more behavioural intervention of in vivo exposure, the authors clearly list this as a primary cognitive strategy, and provide step-by-step instructions on how to develop and carry out these experiments and maximise their benefits in treatment.

The final section of this book shifts to the application of cognitive therapy to five specific anxiety disorders: panic disorder, social anxiety disorder, generalised anxiety disorder (GAD), obsessive-compulsive disorder, and posttraumatic stress disorder (PTSD). The structure of these chapters is similar for each disorder, with the inclusion of a clinical case example, diagnostic considerations, epidemiology and clinical features, the cognitive model of disorder and its empirical status, the disorder-specific treatment plan, and treatment efficacy research. Although each chapter is rich in detail with respect to the latest research on specific anxiety disorders, thereby serving as an excellent reference to academics, the description of disorder-specific treatment is somewhat lacking. With several of the disorders discussed (e.g., GAD, OCD, PTSD), there are a number of different cognitive-behavioural therapy (CBT) protocols that have been described in greater detail elsewhere, with treatment interventions in fact differing according to the protocol in question. For example, with respect to GAD, selected treatment protocols have included targeting emotion regulation, intolerance of uncertainty, and/or meta-cognitions about worry. For each, the manner in which worry reduction is achieved is markedly different, with some treatment interventions listed by the present authors being contraindicated; for example, although decatastrophizing is listed in the book as a treatment component for GAD, this strategy is not recommended when targeting intolerance of uncertainty. Given the complexity of conducting cognitive therapy for specific anxiety disorders, the reader might best view these chapters of the book as a helpful introduction rather than a 'how-to' manual.

Overall, *Cognitive Therapy of Anxiety Disorders: Science and Practise* is an excellent resource for researchers and clinicians working in the field of anxiety disorders. The reference section alone makes it a valuable addition to one's bookshelf, and the authors have done an excellent job of organising a vast, and at time disparate, body of research into a cohesive review of cognitive theory as it applies to anxiety. Although the treatment chapters may be a bit overly ambitious in attempting to review both the research and the application of the cognitive model to the treatment of specific disorders, the book in its entirety is clearly an essential text for those interested in obtaining a comprehensive understanding of cognitive therapy and anxiety.

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Evolution, Culture and the Human Mind, by Mark Schaller, Ara Norenzayan, Steven J. Heine, Toshio Yamagishi, and Tatsuya Kameda (Editors). Routledge, 2009, 304 pages (ISBN 978-0-8058-5911-9, US\$69.95, Hardcover)

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Since the beginning of modern psychology, scholars have attempted to understand the human mind in terms of physiological

and cultural forces. Wilhelm Wundt was exemplary in this task, spending the first half of his career in pursuit of the natural science of finding universal processes of human thought through his laboratory studies on the “inner phenomena” of consciousness. Lesser known are his later volumes examining the evolution of mind through historical human science studies of “outer phenomena” in his *“Völkerpsychologie”* (cultural psychology) of: language, ritual, religion, art and tools. This current volume, *Evolution, Culture and the Human Mind*, follows the lead of Wundt where an attempt is made to provide a synthesis of theory and data across psychological subfields into a holistic framework. Norenzayan, Schaller, and Heine begin the volume with an overview of the scope and themes that arose from their 2004 conference at the University of British Columbia on “Mind, Culture and Evolution.” Explicit throughout this volume is an effort to bridge the “yawning chasm” between perspectives of evolutionary determinism and cultural constructionism. In doing so, there is interest in providing a rigorous multidisciplinary scientific effort to solve this foundational problem for psychology. As such this volume provides an interesting and insightful examination of the evolution of consciousness, cognition, decision-making, actions, and cultural norms in terms of collective consequences and genetic mechanisms.

The volume is divided into three sections where several dialectical themes (theory/data, top-down/bottom-up, ecological/social, diversification/integration) are woven throughout. Overall the volume offers nice flow from one collection of essays to the next as themes are picked up and let go, only to return later on. The first section on “How Evolution and Culture Fit Together” builds from Donald Campbell’s nonreductive model of collective evolution. Throughout the section this view is contrasted with Richard Dawkins’ bottom-up type of determinism. The section begins with Paul Rozin’s presentation of Richerson and Boyd’s recent book, *Not by Genes Alone*, as a significant theoretical influence behind the current volume. He also provides a succinct overview of the present issues, calling for the integration of evolutionary theory and cultural data in understanding the human mind at this nexus of evolution and culture. Roy Baumeister presents his theory of “the Cultural Animal” as a top-down approach to the coevolution of language, intelligence, self, and culture, while Chiu, Kim, and Chaturvedi similarly present Campbell’s perspective. They counter the traditional individual-selection model with a sociocultural model of vicarious selection. These authors contend that collective evolution shapes beliefs, the division of labour and the restraint of selfishness. In contrast, Dutton and Heath return to Dawkins’ meme concept describing cultural variation as a product of the selective retention of elementary cultural ideas around a core set of values and beliefs. This occurs through the factors of: memorability, interruption and emotional significance. In Chapter 6 Lee Kirkpatrick considers the “Ring Species” concept to describe both the researchers at either end of this nature-nurture debate as well as the potential contributions of the evolutionary and anthropological approaches to the search for causal mechanisms of memes and culture.

The second section, “Evolutionary Bases of Cultural Phenomena,” examines how evolutionary theory helps to understand a prototypical culture. Here causal mechanisms and possible pathways to the development of higher-order social phenomena are considered. Steven Gangestad takes an adaptationist orientation considering possible causal roots for psychological traits as adapta-

tions, exaptations, and by-products in search of a mechanism for the genesis of culture from preexisting elements. This theoretically oriented paper is complemented by Solomon, Greenberg, Pyszczynski, Cohen, and Ogilvie’s chapter on the genesis of spiritual beliefs as the product of higher consciousness, self awareness and “Mortality Salience.” Drawing from comparative research on Terror Management Theory, they offer empirical support for this theoretical position. Shariff, Norenzayan, and Henrich continue on this theme examining the development of Gods as mechanisms for social control within early cultures. The need for cooperation and monitoring behaviour are the selective pressures presented as the source of Gods. Their presentation of “reputation-based morality” is followed by Randolph Neese’s chapter which focuses on social selection and the roles of resources, social status, exchange and cooperation. Kameda, Takezawa, Ohtsubo, and Hastie continue examining these themes as they provide an adaptationist perspective, examining the push and pull of egoism and cooperation. They consider the emergence of independence and interdependence as strategies that are selected for by ecological factors such as food scarcity.

Transitioning into the third section, “Evolutionary Universals and Cross-Cultural Differences,” the volume turns to an examination of social systems dynamics within diverse ecological contexts. Several accounts are presented here of the cultural variability of psychological traits, largely focused around the “individualist” and “collectivist” strategies and identities. Together they raise the emic-etic question of specific cultural manifestations (emics) versus universal trans-cultural capacities (etics). Debi Roberson provides an interesting and well substantiated update on the Linguistic Relativity Hypothesis, providing support through a rich array of cross-cultural empirical studies on colour perception and categorization. Yamagishi and Suzuki follow this up with their examination of the equilibrium of social institutions and the development of “default strategies” for interpersonal action, showing empirical support of American and Japanese styles. Kitayama and Bowman continue the investigation by providing a fascinating account of the genesis of individualism on the frontier. Here, through empirical investigation they demonstrate national and regional variations amongst a collection of frontier migrations across three continents. Next, Daly and Wilson offer a critique of Nisbett and Cohen’s case for a “Culture of Honour” as explanation for varying rates of homicide. Instead they make the case that such variability is due to relative economic inequality rather than persistent cultural values. Shifting from economic to disease ecologies, Schaller and Murray consider the possible role of infectious disease prevalence rates on shaping individualism and collectivism, introversion and extroversion, and other behavioural styles. In closing, Kenerick, Nieuweboer, and Buunk reflect back on the relationship between evolution (nature) and culture (nurture). They also contend that the colouring book metaphor is a better pedagogical and theoretical instrument than the traditional blank slant metaphor.

Overall this volume provides a rich and stimulating foray into the nexus of evolution and culture. Just as Wundt reportedly struggled to balance Dilthey’s natural and human sciences perspectives in his psychology, the present volume alternatively attempts to move beyond such a “false dichotomy” in providing integrative hypotheses regarding a myriad of relationships amongst mind, behaviour, culture, and genetics. This volume shows a dominance of natural science (cross-cultural) inclinations

where some readers may call for more voice given to phenomenological and hermeneutical (cultural) human science contributions. Other critics may challenge the reliance upon correlational, comparative, and post hoc data to bolster claims of causality in support of various theoretical suppositions. As Sir Karl Popper held, our best scientific practise involves the making of bold conjectures and rigorous attempts to falsify those conjectures without falling into the trap of positivist inductive verification. Keeping this in mind, I applaud these authors on their step into this risky territory and their participation in this historical discourse which I expect will foster further conversation and theoretical integration and understanding.

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