Challenging dangerous ideas: a multi-disciplinary critique of evolutionary psychology

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Introduction

“Evolutionary Psychology” (EP) is used in this Special Theme issue to denote the thought of an influential group of researchers including, among others, Leda Cosmides, John Tooby, David Buss, and Steven Pinker. Their approach to evolutionary psychology (intended here as the general field of inquiry, following Rauscher and Scher 2003) is based on a specific set of assumptions. These assumptions include a commitment to adaptationism, massive modularity, species-typicality, and the concept that human psychological mechanisms have been selected during the environment of evolutionary adaptiveness, an unspecified period during human evolution spanning the Pleistocene era (Bolhuis, Brown, Richardson, and Laland 2011; Buller 2005; Rauscher and Scher 2003; Buss 2005). Other terms have been used to refer to the same approach, such as “Santa Barbara school of evolutionary psychology” (Bolhuis et al. 2011; Buller 2005) and “narrow

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evolutionary psychology.” The latter denomination highlights the “narrower range of assumptions” adopted by its proponents compared to other evolutionary approaches (Rauscher and Scher 2003 p. 2). Indeed, these assumptions are not shared by other evolutionary scientists. As a consequence, alternative approaches to evolutionary psychology have been developed (e.g., Scher and Rauscher 2003; Laland and Brown, 2011) and alternative denominations have been proposed (e.g., “broad evolutionary psychology,” Rauscher and Scher 2003; “evolutionary psychology in the round,” Heyes 2000).

Not only do the four authors in this issue make the case against this narrow evolutionary approach by arguing that the foundational evidence of EP theories do not stand up to academic scrutiny, but they go further in making the claim that EP is a new incarnation of age-old tropes regarding genetic differences based on sex that have played a role in maintaining pre-existing power structures in society. Earlier forms of such racist and sexist theories were predominant in the study of intelligence and in stable personality traits (Gould 1981). As Gould pointed out, when researchers use frameworks that corroborate their previously held biases and go looking for data that only substantiate those biases, it is inevitable they will find truths that confirm what they had suspected all along.

While this criticism is not new, evolutionary psychologists subscribing to this narrow approach (EPs) continue to broadcast the claim that, however offensive their findings may be, such “facts” are innocently born from a dispassionate science. Steven Pinker (Pinker 2007) contends that the resistance to these “facts” is a contemporary version of witch burnings—just another way of censoring what he calls *dangerous ideas* simply because they are found to be morally offensive. The present articles challenge Pinker’s take on *dangerous ideas* recognizing that facts cannot be selectively separated out from their context, rendered apart from the social fabric of history that has a track record of using those ideas to destructive and inhumane ends. The four authors understand that EP’s ideas are not dangerous in the way Pinker thinks them to be, neither as an affront to the status quo nor to the “politically correct” thinking he so admonishes, but that EP’s ideas are dangerous precisely because they defend a line of prejudiced thinking that has been around for centuries.

Pinker asserts that ideas like EP make “blood boil” because they challenge “what is,” while the articles in this issue grow from an understanding that the ideas of EP only work to reify very old ideas that have been injuriously etched on the lives of bodies through difference epochs. Indeed, ideas can appear innocuous when viewed in a vacuum, as Pinker seems to do. Only with a fragmented sense of history could the weight of such ideas seem to not only be resistant to business as usual, but to not really matter at all. Only when connections are made between ideas over time and place do patterns of oppression begin to emerge. The four authors in this special issue were catalyzed by such lack of connections in EP, and by the recognition that real dangerous ideas—ones which are revolutionary rather than oppressive (like feminism, for instance)—when situated in context and within a public discourse of interpretation and debate can function to challenge the world as we know it.

This special issue provides a multi-disciplinary challenge to a number of EP assumptions that have enabled such dangerous ideas to flourish. That the authors

come from different disciplinary backgrounds is integral to that challenge, as the alleged interdisciplinary nature of EP is often conceptualized by its proponents as compatible with concepts developed in other fields. In this issue, the authors argue that such compatibility reflects more the increased under-specification of key concepts in EP and the redressing of its theoretical foundations (through the absorption, typically unacknowledged, of concepts developed by other evolutionary approaches) than real similarity between ideas independently developed in different fields. In response to critics, EP has shown a remarkable ability of changing its “theoretical borders”, without compromising allegiance to its defining assumptions (see above) and its empirical method.

Alison Nash, a developmental psychologist with a background in animal behavior, provides an overview of historical and current standard scientific practices for investigating the evolution of behavior. She argues that EP ignores its historical precedents—ethology and the instinct critics, and while acknowledging current perspectives—epigenetics and Developmental Systems Theories, does so only in terms of lip service. In particular, EP does not investigate the dynamic interplay between genes and context that is essential for understanding the development and evolution of behavior. Thus, EP does not conform to the rigorous standards of biology or psychology, is often unresponsive to methodological critiques, skirts theoretical controversies, and is disconnected from a large body of scholarship on issues surrounding the evolution of behavior.

Giordana Grossi, a cognitive neuroscientist, explores the proposal, within EP, to redefine modularity. This concept was proposed by Fodor (1983) to explain the functional architecture of the mind, divided in modular and non-modular systems. Modular systems were deemed to have certain architectural features, such as being fast, accessed automatically and only by a restricted set of stimuli, impermeable to beliefs or contextual factors, innate, and hardwired. Evolutionary psychologists recast the term according to an evolutionary framework to refer to evolved adaptations. In this view, the human mind comprises numerous specialized modules (e.g., face recognition, social exchange, theory of mind) that have evolved under selective pressure to solve recurrent problems in our ancestral past (Cosmides and Tooby 1997). These modules were assumed to be supported by dedicated neural circuits, shaped by natural selection, and genetically specified (Pinker 1997). Some EPs, in particular Barrett and Kurzban (2006), have proposed to adopt a definition of modularity purely in terms of functional specialization. Here, Grossi argues that this strategy trivializes the investigation of neurophysiological processes in evolutionary theorizing and leaves the door open to too much flexibility on what counts as evidence for purportedly evolved modules.

Gowri Parameswaran, a child and educational psychologist, makes a case for the thesis that much of the uniformity that we see in mate selection, marriage practices and childrearing is an outcome of a European empire based on Judeo-Christian values that once held control over most of the territories of the world. Historical records demonstrate that, prior to the coming of the European colonists to many regions of the world, there was a fantastic diversity of mating practices and child-rearing styles. Historical records also demonstrate that the European conquerors were discomfited by these diverse practices and used force and persuasion to

transform the marital and sexual values of these communities to conform to Christian ideals. Parameswaran examines existing hunting and forager communities and finds that most of them practice a communal form of childrearing that involves both related and unrelated adults. Among forager communities that have greater contact with the outside world, there is much more assimilation to larger state values. Finally, even in the most patriarchal societies, fathers exert a great deal of control over the rearing and education of young children. In many patriarchal communities, even when the mother leaves for the natal family, she is forced to leave her children behind with the father's family so the children are reared with their father's family ideals and values. For a father, it is not just about passing on one's genes, but also about being there to pass on one's stories and traditions.

Suzanne Kelly, an independent feminist scholar with a background in philosophies of the body and the environment, looks at those EPs who push to disrupt feminist critiques against EP by attempting to join EP to the work of feminism (Buss and Schmitt 2011; Fisher et al. 2013; Fehr 2012; Geher 2009; Vandermassen 2005). She argues that, while academic feminism has a demonstrated history of integrating outlying theories and approaches and expanding and remapping its margins through fierce and lively debate, there are limits to what it can absorb. She details three ways in which EP is ultimately incompatible with a feminist politics as it is articulated in a history of feminist theory. Where EP professes fixed notions of (1) sexual dimorphism (2) sexual essentialism and (3) a meta-theory for feminism, feminist theory has a history of contesting them. While these three ways do not exhaust the differences that separate the two, Kelly suggests that it is within the disputed terrain of these concepts that feminism flourishes and within which EP would ultimately flounder.

Despite the differing disciplines and perspectives of the authors, several common themes emerge throughout their articles. All authors note the centrality of context and the multiplicity of influences that shape human behavior, including the necessity of identifying what occurs over real time, and the cascade of transactions historically up to the present. Causes of behavior must be anchored to proximate, material factors. In contrast, EP is a-historical and a-material. While allegedly anchored in biology, EP explanations are surprisingly disembodied, disconnected from the material world. Although EP claims to address contextual influences, in reality these attempts merely serve to deflect critiques, and prevent engagement and dialogue with critics and those with differing views.

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