

## Correspondence

EDITED BY MATTHEW HOTOPF

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### A defence of evolutionary psychology

The letter by Rose & Lucas (2001), with its unconventional structure (having been written by Lucas with a lengthy quote from Rose but then signed by Rose as the first author), repeats the misleading arguments that can be found in abundance in Rose & Rose (2000). Professor Rose claims to welcome a hypothesis-driven scientific discipline of evolutionary psychology but laments what is, according to him, the present state of the discipline that is no more than an “untestable bunch of anecdotes based upon *a priori* ideological convictions”. He is also indignant at my suggestion that he is in effect in the camp that holds that the human mind is a blank slate.

As to the first point, his position is far from credible. He contends that the hypothesis that the human psychological make-up was formed during the Pleistocene is incorrect and that this is somehow fatal to the whole enterprise of evolutionary psychology. In fact, the contention that the human psyche or mind formed primarily during the Pleistocene is no more than an empirical question that requires testing through evidence. If evidence from various sources shows this to be incorrect, then this idea should certainly be modified or abandoned but, whichever way this question will be settled, it will not herald the end of evolutionary psychology. The core idea of evolutionary psychology is the assumption that the human mind has a species-specific architecture that contains a degree of variability and plasticity depending on environmental influences, but (and this is the most important point) it is not infinitely malleable, as the standard social science model would have us believe. It is rather surprising that Rose, in the same breath, claims to reject the *tabula rasa* view of the mind and rejects

any hypotheses that suggest it may have any definable architecture on the grounds that conceding this is genetically deterministic. If the mind is not a blank slate, then it should have some architecture. For a Darwinian, this architecture is partly (not wholly) determined by our genetic heritage which, in turn, has been shaped by aeons of selection in a particular type of environment (whatever that may be). We can argue about what this architecture may look like through proposing hypotheses and empirically testing them.

Rose chooses to ignore the abundant evidence of the vibrancy of evolutionary psychology where hypotheses and theories are continually tested, debated, modified and discarded. It is a fast-moving field where one can quickly be overtaken by new ideas and new evidence. Take, for example, the waist-to-hip ratio that Rose has cited. The suggestion was made in the early 1990s that there may be a universally attractive human female shape that signals maximum reproductive value. This triggered transcultural comparison studies by evolutionary psychologists that showed that there were exceptions to this (see for example Marlowe & Westman, 2001). It is likely that the hypothesis will now be modified to incorporate the effect of ecological influences. There are many other examples of such vigorous hypothesis-testing such as in the area of human sexuality where major theoretical modifications have taken place based upon empirical findings (see Buss, 2000).

**Buss, D. (2000)** *The Dangerous Passion: Why Jealousy is as Necessary as Love or Sex*. London: Bloomsbury.

**Marlowe, F. & Westman, A. (2001)** Preferred waist-to-hip ratio and ecology. *Personality and Individual Differences*, **30**, 481–489.

**Rose, H. & Rose, S. (eds) (2000)** *Alas Poor Darwin: Arguments Against Evolutionary Psychology*. London: Jonathan Cape.

**Rose, S. & Lucas, P. (2001)** Evolutionary psychology revisited (letter). *British Journal of Psychiatry*, **178**, 573.

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The arguments put forward by Rose & Lucas (2001) are rather unclear. On the one hand, Professor Rose emphasises that “any understanding of the human mind and brain needs to locate its structure and workings in the context of evolution and development, as well as social, cultural and technological history”. Most sociobiologists or evolutionary psychologists would endorse this statement. However, the main reason behind Abed’s (2000) editorial was that since the Second World War psychiatric research (with the notable exception of Bowlby) has deliberately ignored the possibility that human beings are the result of evolutionary processes, for understandable political reasons. All the other factors on Rose’s list have been carefully studied, and the result is a mixture of incomplete and incompatible theories, with significant gaps in knowledge. For example, it has not been explained why certain mental disorders show a gender imbalance. An evolutionary perspective could provide fresh approaches and offer a much-needed integrative theoretical framework.

On the other hand, Rose later makes the accusation that “what is at stake is the autonomy of the social sciences as research fields from the imperialistic claims of an overly reductive biology at the hands of these new evolutionary fundamentalists”. This is a wholly exaggerated claim, but even if it were true, why does he regard the autonomy of the social sciences as so fragile? Social scientists are keen to use developments in mathematics, which is an inherently reductionist science. In any case, neither psychiatry nor psychology is a social science.

Rose’s ultimate objection is that “what currently passes for evolutionary psychology is little more than an untestable bunch of anecdotes based upon *a priori* ideological convictions”. This could be said of most current psychiatric theories, exactly because the evolutionary context has been ignored. Surely, each new hypothesis should be scrutinised on its own merit. More than 140 years ago Darwin (1859; 1985 edn: 458) predicted that “in the distant future . . . psychology will be based on a new foundation”. For various ideological reasons