

Conclusions

We evolved through natural selection. Selection has crafted and refined our physiology into multiple functionally specialised mechanisms. Might it also have crafted and refined our psychology in a similar way? There is no *a priori* guarantee that it has. But it should be clear that such a notion is a real contender. And if that is indeed the case, and there are no reasonable grounds to dismiss this, then might not hypothesising about adaptive problems and adaptive solutions yield new insights? As imperfect as the method is, might it not yield new and permanent editions of knowledge?

This thought was developed and launched into a programme of research in the early 1990s by pioneering thinkers and continues to grow in both research output and research affiliates. They also packaged this thought into an overly ambitious paradigm. In doing so and in baptising the programme as ‘evolutionary psychology’, I believe they made a fundamental strategic mistake—which purchased visibility with the public at the expense of respectability with peers, a mistake that has disabled understanding and disfigured the debate to this very day.

Nevertheless, I believe that once attention is decisively shifted from evolutionary psychology as a naive explanatory project to a cautious exploratory project, once it is unbundled as a paradigm and reframed as a streamlined research programme, I believe any reasonable person, no matter her conception of evolution, no matter her conception of the mind, no matter her outlook on the ultimate empirical prospects and bets of adaptationist thinking in psychology, will consent to the legitimacy, to the value and to the role of evolutionary psychology in the evolutionary behavioural sciences.

It is precisely this shift in attention, this shift in focus and in emphasis, the need for it, how it can be done and the ramifications of doing so, that this book has sought to explicate and to champion. No doubt

various particular points can and will be disputed. But I believe the overall shift is as secure as it is needed.

Evolutionary psychology is a hypothesis-driven empirical science. I've argued that evolutionary psychology can:

- H1 Hypothesise unknown design features of extant psychological mechanisms, leading to novel predictions of psychological phenomena
- H2 Hypothesise unknown psychological mechanisms, leading to novel predictions of psychological phenomena
- H3 Hypothesise traits as by-products of psychological mechanisms, leading to novel predictions of psychological phenomena
- H4 Stimulate multidisciplinary research activities, leading to more sophisticated hypotheses and more complete ultimate and proximate explanations

As evolutionary psychology is in the business of generating and testing hypotheses about psychological mechanisms, it is not only eminently reasonable, but should also be welcomed by all.

Suppose we observe trait *T*. It's developmentally reliable and robust. It can be observed across cultures. It's a suitable candidate for adaptationist hypothesising—not that it must be an adaptation, but that it potentially could be and to an extent that merits further investigation. Accordingly, we deploy an adaptationist analysis. We can ask whether trait *T* has a function. If so, how has natural selection designed that mechanism to serve that function? Posing these questions can lead to new insights. We can think in new ways about how the mechanism develops and operates, such as developmental and environmental contexts that calibrate the mechanism, the cues that activate the mechanism, the strength and variety of outputs, and so on. And, crucially, we can articulate these to the point of testability.

Potentially much understanding is to be won by hypothesising such traits as adaptations. It's commonplace that often the most difficult thing to see is right in front of one's nose. We need theories and hypotheses to guide us into identifying patterns. Evolutionary psychology can guide researchers into identifying new behavioural patterns, new demographic patterns, new facts—facts that do not readily lend themselves to discovery by non-adaptationist perspectives. And potentially groundbreaking, reflecting on adaptive problems and scenarios holds out the promise of discovering entire mechanisms we would unlikely find by other methods.

Initial evolutionary psychology hypotheses aim, or should aim, not for the last evolutionary word on a given phenomenon, but the first. They are in constant adjustment—both with the research programme's own findings and findings from adjacent research programmes and disciplines. If this is done, this should generate sophisticated hypotheses, as well as generate progressive increments to our understanding of psychological and social phenomena. In virtue of its successful novel predictions, evolutionary psychology can help stimulate multidisciplinary activity towards establishing the multiple lines of evidence needed to fully vindicate adaptationist explanations. The forthcoming PsychTable, which promises to codify and evaluate the range and strength of evidence for purported psychological adaptations, should help foster the interdisciplinary cooperation needed to vigorously vindicate psychological adaptation claims.

Given the range of phenomena that psychological adaptations, in various degrees, can influence, and given that psychological adaptations can generate a multitude of surprising by-products, evolutionary psychology has a wide remit. Finally, as a general mode of scientific procedure, we are inclined to accept hypotheses insofar as they make successful predictions of new data. At the very least, evolutionary psychology is capable of meeting this standard and has done so in multiple cases.

This is the positive case for evolutionary psychology. The streamlined case. What I have been championing and what I believe best represents evolutionary psychology practice. There should be little to find objectionable about it.

The moderate sceptic claims evolutionary psychologists should change their daily practice. There's more to evolutionary theory than adaptationism. That's true, but this fails to appreciate the importance of such thinking in the discovery of unconscious processes. The real issue is not whether evolutionary psychology is outdated, but whether it's exhausted, whether it's just recycling old points. And there are no indications that it is.

The strong sceptic focuses on the evidential status of evolutionary psychology explanations. She sets out the tough standards complete adaptationist explanations should meet, notes the shortfall and then dismisses evolutionary psychology. But evolutionary psychologists do not have to meet the heavy evidential requirements identified by Richardson and others in order to pursue legitimately adaptationist theorising in psychology. To insist these heavy requirements be met at the outset is dangerous. And to insist or to imply that evolutionary

psychology alone meet these heavy evidential demands is disingenuous. Yes, evolutionary psychology cannot possibly meet the evidential demands—but evolutionary psychology doesn't need to do this alone. And there's no reason to suppose the evolutionary and behavioural sciences cannot do so collectively.

If evolutionary psychology is to cease being dismissed, its champions need to shift attention to its heuristics, to its rich possibilities of discovery across the spectrum of social phenomena. These heuristics represent a unique opportunity to discover hitherto unknown design features of known traits and to even discover entire traits hitherto unknown, to make genuine and permanent editions to knowledge. That's precious—too precious to be overshadowed by theoretical excess. Too precious to be knocked about by jibes about just so stories.