



LETTER TO THE EDITOR

From Dr Nigel Barber

Sir,

The Science of Romance: Response to Petto Review

Thank you for the opportunity to respond to Petto's review of my book *The Science of Romance: Secrets of the Sexual Brain* (Prometheus, 2002). While I respect the right of reviewers to make fair criticisms and am quite receptive to constructive critical advice, Petto's remarks evince a lack of understanding of evolutionary psychology and are so lacking in balance that I feel obliged to take on the unpleasant task of correcting some of the most blatant errors and biases.

To begin with, Petto claims that the book is in response to a 1995 paper by David Buss. In reality, *The Science of Romance* takes evolutionary psychology in several new directions that were not apparent eight years ago. More generally, Petto's attempt to force evolutionary psychology into the straitjacket of comparative anatomy is not a viable research program.

Petto claims that the book is stuck in an obsolete "man-the-hunter" scenario creating the impression that it is both out-dated and anti-feminist. In reality, the book is bang up to date, acknowledges the greater caloric importance of foraging over hunting, and presents an unusually detailed picture of occupational specialization in pre-industrial as well as modern socie-

ties. Several female readers went through the text in search of possible sex biases prior to publication. His argument that prehomnids may not have hunted is irrelevant to the content of the book. Another non sequitur is the claim that because societies differ in the significance of paternal provisioning (Hadza example), paternal investment is generally unimportant for children's fitness.

Petto fires off a lot of guns without hitting any targets. That is, he makes a number of blanket criticisms without giving clear or convincing examples. Thus the author is accused of telling "just-so" stories without any specifics. Another charge is that the book confuses proximate with ultimate causation. The confusion would appear to be all in the reviewer's mind. If Petto had any research credentials in psychology, he would understand that to describe an interaction between genetics and environment is *not* to confuse ultimate and proximate causes.

Although *The Science of Romance* acknowledges the data on species-typical human psychological characteristics it moves on to the much more challenging problem of why the same genotype develops differently in different rearing environments. Thus, a person with low impulse control develops criminal tendencies in a stressful home environment but not if they are raised in comfortable surroundings by devoted parents.

Due to his failure to grasp such subtleties, Petto claims that the book separates into two projects. He is kind enough to claim that

the second half is a “complete failure” and devoid of testable hypotheses. In reality, it is chock full of testable hypotheses. Many have been tested empirically and published in peer-reviewed papers by the author among others. Each of these studies has produced a remarkably clear vindication of the benefits of evolution-minded research for predicting human behavior in modern environments using dependent variables as diverse as crime, economic success, single parenthood, and fashions of bodily attractiveness, dress, and beardedness. The author’s research on fashion allows us to see changes over time as an orderly function of the marriage market, thus explaining something that social scientists had previously written off as random and inexplicable. Others can judge the value of such discoveries for themselves. Suffice it to say that they do not come often in the lives of most scientists. Complete failure, my hat!

The Science of Romance makes its most original contribution in suggesting that differences among societies, and changes within a society over time can both be understood in terms of adaptive processes acting in individuals. To take a simple example, American women today dress far more provocatively than was true of the earliest immigrants because they are economically independent. Women in the Middle East dress to avoid sexual provocation because they are completely dependent on husbands who require chastity as a guarantee of paternity. This remains an evolutionary explanation, even though our ancestors did not wear clothes, because it reflects the playing out of ancestral reproductive strategies in modern environments, a complex gene-environment interaction. Before clothing, naked women would have acted provocatively, or not, without the assistance of dress symbolism. Evolutionary psychology is not simply a matter of understanding hunter-gatherer adaptations, as Petto supposes, but involves a natural science approach to modern behavior and modern socie-

ties.

Quite the nabob of negativity, Petto seems intent on demolishing the contributions of evolutionists to modern psychology. Such attempts are doomed to failure precisely because evolutionary psychology is such a creative force that motivates people towards research productivity and innovation. Our field will advance through research dynamism and not through a Procrustean application of inappropriate research paradigms.

Petto would appear to have an axe to grind in relation to evolutionary psychology and recycles criticisms from a review of a different book by another author that are repeated like a slogan. My advice to Petto is that he should join this creative movement instead of seeking to tear it down. In our civilization, Beowulf always wins out over Grendel, English bards defeat Scots reviewers, and scientific creativity prevails over small-minded naysaying.

The negativity of Petto’s review is remarkable considering that the book has been reviewed many times and all of the other verdicts are uniformly positive. It has been generously endorsed by many of the leading researchers in the field, including David Buss, Michael Cunningham, David Geary, and Linda Mealey. It is also the subject of favorable review by David Schmidt in a piece that is not yet published. Among its other accolades, *The Science of Romance* received the Independent Publisher’s Book Award for Psychology in 2003. I hope that readers who were put off by Petto’s absurdly negative and unbalanced criticisms will consider it afresh. Apart from offering an entertaining panorama of the many research achievements of evolutionary psychologists, it points the way to an exciting future for our field.

Sincerely,

Nigel Barber, Ph.D.