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Science and technology

## Sexual selection Hunkier than thou

Scientists are finally succeeding where so many men have failed: in understanding why women find some guys handsome and others hideous. When it comes to partners, men often find women's taste fickle and unfathomable. But ladies may not be entirely to blame. A growing body of research suggests that their preference for certain types of male physiognomy may be swayed by things beyond their conscious control — like prevalence of disease or crime — and in predictable ways.



Masculine features tend to reflect physical and behavioural traits, such as strength and aggression. They are also closely linked to physiological ones, like virility and a sturdy immune system. The obverse of these desirable characteristics looks less appealing. Aggression is fine when directed at external threats, less so when it spills over onto the hearth. Sexual prowess ensures plenty of progeny, but it often goes hand in hand with promiscuity and a tendency to shirk parental duties or leave the mother altogether.

In a paper published earlier this year Dr DeBruine found that women in countries with poor health statistics preferred men with masculine features more than those who lived in healthier societies. Where disease is rife, this seemed to imply, giving birth to healthy offspring trumps having a man stick around long enough to help care for it. In more salubrious climes, therefore, wimps are in with a chance.

Now, though, researchers led by Robert Brooks, of the University of New South Wales, have taken another look at Dr DeBruine's data and arrived at a different conclusion. They present their findings in the *Proceedings of the Royal Society*. Dr Brooks suggests that it is not health-related factors, but rather competition and violence among men that best explain a woman's penchant for manliness. The more rough-and-tumble the environment, the researcher's argument goes, the more women prefer masculine men, because they are better than the softer types at providing for mothers and their offspring.

Since violent competition for resources is more pronounced in unequal societies, Dr Brooks predicted that women would value masculinity more highly in countries with a higher Gini coefficient, which is a measure of income inequality.

And indeed, he found that this was better than a country's health statistics at predicting the relative attractiveness of hunky faces.

The rub is that unequal countries also tend to be less healthy. So, in order to disentangle cause from effect, Dr Brooks compared Dr DeBruine's health index with a measure of violence in a country: its murder rate. Again, he found that his chosen indicator predicts preference for facial masculinity more accurately than the health figures do (though less well than the Gini).

However, in a rejoinder published in the same issue of the *Proceedings*, Dr DeBruine and her colleagues point to a flaw in Dr Brooks's analysis: his failure to take into account a society's overall wealth. When she performed the statistical tests again, this time controlling for GNP<sup>1)</sup>, it turned out that the murder rate's predictive power disappears, whereas that of the health indicators persists. In other words, the prevalence of violent crime seems to predict mating preferences only in so far as it reflects a country's relative penury.

The statistical tussle shows the difficulty of drawing firm conclusions from correlations alone. Dr DeBruine and Dr Brooks admit as much, and agree the dispute will not be settled until the factors that shape mating preferences are tested directly.

Another recent study by Dr DeBruine and others has tried to do just that. Its results lend further credence to the health hypothesis. This time, the researchers asked 124 women and 117 men to rate 15 pairs of male faces and 15 pairs of female ones for attractiveness. Each pair of images depicted the same set of features tweaked to make one appear ever so slightly manlier than the other (if the face was male) or more feminine (if it was female). Some were also made almost imperceptibly lopsided. Symmetry, too, indicates a mate's quality because in harsh environments robust genes are needed to ensure even bodily development.

11 Next, the participants were shown another set of images, depicting objects that elicit varying degrees of disgust, such as a white cloth either stained with what looked like a bodily fluid, or a less revolting blue dye. Disgust is widely assumed to be another adaptation, one that warns humans to stay well away from places where germs and other pathogens may be lurking. So, according to Dr DeBruine, people shown the more disgusting pictures ought to respond with an increased preference for masculine lads and feminine lasses, and for the more symmetrical countenances.

That is precisely what happened when they were asked to rate the same set of faces one more time. But it only worked with the opposite sex; the revolting images failed to alter what either men or women found attractive about their own sex. This means sexual selection, not other evolutionary mechanisms, is probably at work.

The Economist, 2010

noot 1 GNP: gross national product

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