

Beards: Too Hip For Their Own Good

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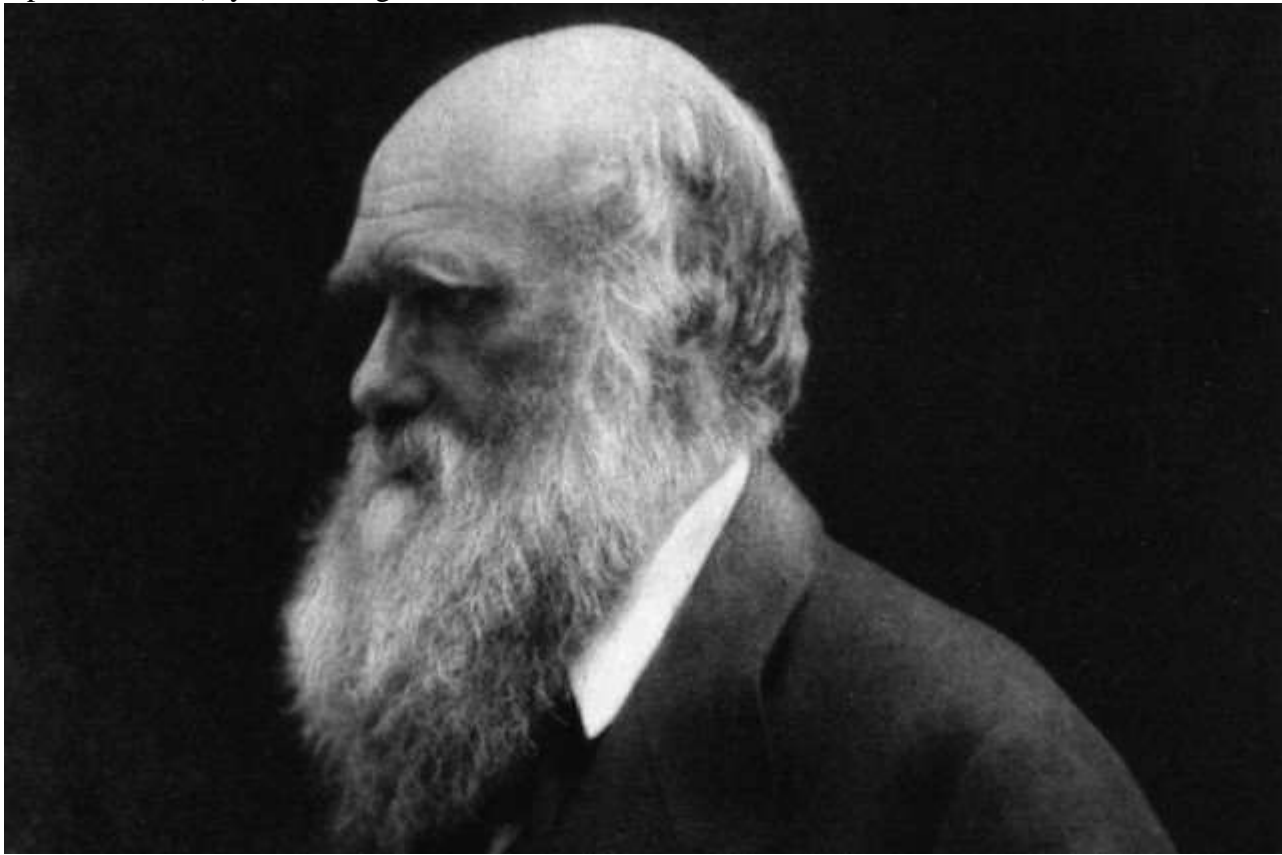


photo credit: Charles Darwin, photographed by Julia Margaret Cameron

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With the exception of a few heartbreakers here and there, beards and stubble are sexy. Don't argue, [science has already confirmed](#) the obvious. But now, new work suggests that [we may have reached peak beard](#). And its universal sexiness is to blame!

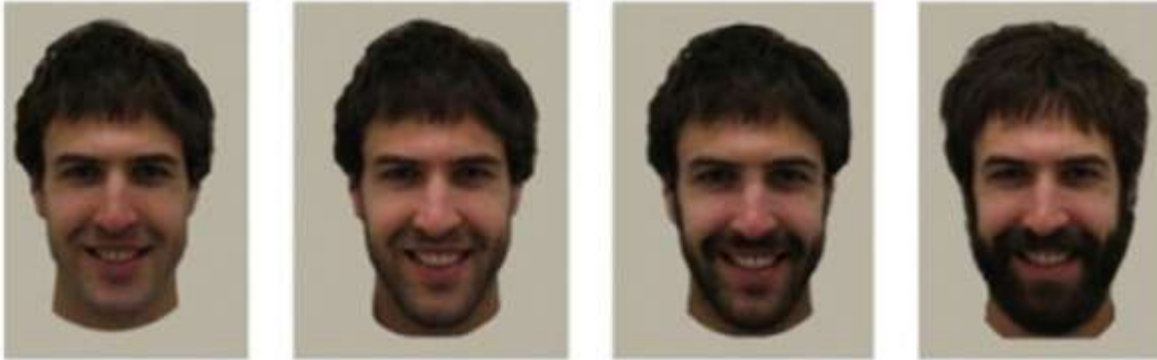
In the [chronicles of facial hair history](#) spanning the last century, we've seen many trends come and go in cycles. "Sideburns moved on to mustaches, then full beards," [Rob Brooks from University of New South Wales says](#). "In the 1970s it was handlebar moustaches. In the 80s it was Magnum PI moustaches. In the 90s we saw a lot of clean shaven men, and now big bushy beards are back."

So, Brooks and [UNSW's Barnaby Dixson](#) and Zinnia Janif decided to investigate why beard fashions come and go, and why there's no one best facial hair pattern. They speculated that the diversity we see is due to "negative frequency dependence," which just means that rare traits enjoy an advantage. Under NFD, good or bad depends on how common the gene is, Brooks explains.

The team showed volunteers a suite of photographs of 36 men with varying levels of beardedness. Each man had been photographed at four different times: when clean-shaven, with five days of growth (light stubble), 10 days of growth (heavy stubble), and at least four weeks of untrimmed growth (full beard). The study participants -- 1,453 women and 213 men recruited through their website [Sex, Genes & Rock 'n' Roll](#) -- had to rate the attractiveness of 36 faces, one photo of each man.

For the first 24 pictures, the researchers manipulated the rarity of beard types. Subjects either saw all men clean shaven, all with full beards, or six men from each of the four levels of beardedness. Then, they watched how the subjects rated the same, last 12 pictures. These comprised three from each beard level.

If frequency-dependent selection does not play a role, then context shouldn't matter. But it did: Patterns of facial hair enjoy greater attractiveness when rare than when they're common, as predicted. When there were fewer clean-shaven faces among the first 24 pictures, they enjoyed a significant premium in attractiveness ratings in the last 12. Much more so than when they were common. When full beards were rare or when the four levels of beardedness were evenly distributed in the first 24, full beards enjoyed significantly higher -- about 20 percent -- attractiveness than when full beards were common. Preference for stubble didn't really vary across the three treatments, and the overall effect was the same in men and women.



It would seem that innovative new styles may enjoy a premium while they're still rare. And beards, the findings suggest, are likely to become less attractive as they become more popular.

"Big thick beards are back with an absolute vengeance and so we thought underlying this fashion, one of the dynamics that might be important is this idea of negative frequency dependence," [Brooks tells BBC](#). "The idea is that perhaps people start copying the George Clooneys and the Joaquin Phoenixs and start wearing those beards, but then when more and more people get onto the bandwagon the value of being on the bandwagon diminishes, so that might be why we've hit 'peak beard'."

In evolutionary genetics, the NFD phenomenon is an important one, favoring rarer forms of the same gene over common ones. Take guppies for example. Males with rarer combinations of colorful spots mate more and are eaten less. Win win! But then, that pattern starts to spread rapidly "until it becomes so common it attracts attention from predatory fish and starts looking like old hat to female guppies," [Brooks explains](#). (P.S. Rob, thanks for the shout out!)

The [work](#) was published in *Biology Letters* this week.

[[University of New South Wales](#) via [Science](#), [BBC](#)]

Images: [Julia Margaret Cameron](#) via [Wikimedia](#) (top) & [Barnaby Dixson](#) via [The Conversation](#) (middle)

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