TO GET someone else to do the hard work of bringing up your offspring for you is certainly one version of Darwinian success. Genetic analysis has shown it is indeed the case that many nests of many bird species harbour young not sired by the male who is helping to feed them. That led evolutionary biologists to predict something similar might be true for another couple-forming, home-building species, Homo sapiens.
Rates of adultery in humans, though hard to pin down, and probably variable from one society to another, are thought to be above 15% in most places, and sometimes as high as 50%, over the course of a marriage or equivalent long-term partnership. Those biologists therefore expected to find similarly high rates in people of what is known coyly as extra-pair paternity, or EPP.

But, give or take the odd Lucian Freud, it ain’t so. Repeated studies have shown that among those now alive only 1-3% of children are cuckoos in the nest. The present day is, however, a
period of effective contraception and expensive paternity suits, so the biologists still
supposed that if they could only look back a century or two, things would be different.
Research just published in the Proceedings of the Royal Society, however, suggests it wasn’t
so then, either.

If Maarten Larmuseau and his team at the Catholic University of Leuven, in Belgium, are
correct, then at least in Flanders EPPs have never been common, and suspicious fathers
normally have nothing to fear, for even in history only about one married man in 50 actually
wore the horns of the cuckold.

Dr Larmuseau came to this conclusion by studying the Y-chromosomes of men of recorded
genealogy. Y-chromosomes, which carry the gene that starts the process of androgenisation
in a foetus, and thus pass exclusively from father to son, are unusual because most of their
DNA remains undisturbed by a process called crossing over that stirs the rest of the genetic
pot when sperm (or eggs) are formed. They are therefore easy to track through the
generations using DNA markers called single-nucleotide polymorphisms, or SNPs.

By looking at over 1,000 men of recorded genealogy and comparing, where possible, those
whose records said they had a paternal ancestor at least seven generations back, Dr
Larmuseau and his team were able to estimate how accurately this paper genealogy
 corresponded with biological reality, as reflected by the pattern of SNPs. The answer was that
only about 1% of men (and therefore, presumably, of women, too) were conceived on the
wrong side of the blanket, even in an age when modern contraception was not available.

A second study Dr Larmuseau conducted, involving the descendants of 16th-century French
immigrants to Flanders, came up with a figure of 2%—again, in the same range as modern
rates of extra-pair paternity. Which poses a puzzle. For if people in the past were as
adulterous as the data suggest those now alive are, how did they conceive so few children
doing it?

It could be that they were not, and that one effect of modern contraception has been to
liberate instincts previously not acted on for fear of the consequences. Or it could be that
modern contraception is overrated, and that older methods of family planning, such as being
careful about when during a woman’s menstrual cycle a couple have sex, were more effective
than they are given credit for.

Click here to subscribe to The Economist

Follow Business Insider Australia on Facebook, Twitter, and LinkedIn