

A reply to Helena Cronin

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Helena Cronin, authoress of The Ant and the Peacock, was pontificating a few years ago now in The Guardian on how Darwinian theory should inform Blairite social policy... this is a Darwinian's response.

So, men 'set up society', according to Helena Cronin (Profile August 28). I usually shrug aside the routine media distortions of evolutionary theory applied to human behaviour – the 'higgamous, hoggamous' stereotypes about men running around while women stay put. But when someone with the influence of the author of *The Ant and the Peacock* puts up a bourgeois, bowdlerised travesty of Darwinism as gospel, and seeks to apply it as Blairite social policy, it's time to nail a few myths.

First, the myth of women disposed 'to want a single mate'. We are the descendants of fit, female ancestors who reproduced successfully. As mammals with very large brains, human females have to expend a lot more energy to get an offspring up and running than a male *at minimum* has to. So there are going to be differences of strategy and conflicts of interest between the sexes. Nowadays, this battle of the sexes – called by Darwinian feminist Patty Gowaty 'sexual dialectics' – is seen as the engine of evolution. Gowaty deliberately draws analogy with dialectics applied to theory of class struggle as the engine of history and revolutionary change.

For sexually reproducing species, evolution goes like this: males *do* run around, competing to control access to fertile females. But females *don't* stay put; they resist male efforts to control them because they want to choose which particular male gets them pregnant. Males are then forced to counter the females' resistance strategies. Evolution is this process of strategy, countered and countered again.

Biologists have been learning recently how little monogamy exists among female birds and mammals. Females who exercise choice are not necessarily monogamous, as Cronin, an authority on sexual selection, knows well. Astonishing experiments by Robin Baker and Mark Bellis conducted with Manchester University students have demonstrated human sperm competition. This shows that men are disposed to 'believe' (not consciously, of course) that as soon as they lower their guard, their female partners are likely to check out alternative possible mates. Surprise, surprise, when a woman does this, it tends to coincide with her ovulation. This does not mean that all women all the time pursue cuckoldry strategies – just that, evolution has designed us to be good at it if we do. In other words, it paid our ancestors.

Carol Worthman worked with Ju/'hoansi women of the Kalahari, aligning the women's own reports of their sex lives to hormonal records of their menstrual cycles. Monogamy was not what these hunter-gatherer women wanted. Around ovulation, they went looking for love – extra-pair copulations (EPCs) in the jargon of evolutionary ecology.

Among indigenous peoples all over Amazonia, until recent interference by

missionaries, it turns out that the most successful female strategy is to have back-up fathers for each offspring. Children with more fathers survive better. So women carve up the cake of possible paternity, a strategy called 'partible paternity'. Their ideology insists that any man who contributed sperm is one of several fathers of the child. This works better in matrilineal than patrilineal groups. But, it can suit male strategies too, because if one of the child's 'fathers' dies, another man can step in to protect the child. If every man 'steals' roughly the same amount of EPCs, it works out quits in the end, but the children are more likely to survive. It's also more fun. So, there is room for cooperation between the sexes, not just conflict, even when it comes to females not being monogamous.

These small-scale societies are the kind in which we evolved our human nature. Women do not choose to be monogamous, because they get more resources, especially when the going gets rough, and more child protection, from a number of mates – safety in numbers. Having a different father for each offspring also improves the chance of some children surviving disease – the same advantage in genetic variability that lies behind the evolution of sex itself. Women may have to be discreet about behaving so badly, and may *let men think* that they want to be monogamous. But among matrilineal groups like the Canela in Brazil, before the missionaries got to them, both sexes were up-front about and proud of their sexual sociability.

Second, is it a myth that men run around? Current models of how pair-bonds arise among hunter-gatherers stress the male behaviour of 'mateguarding'. It results from male insecurity: he's worried that if he doesn't tag along after 'his' woman, she might find somebody else more genetically interesting. So unless males are there to stop it, female choice would run riot. Although, a majority of societies may *permit* polygyny – because the laws have been made by the rich and powerful in the past 5,000 years – for most men, throughout most of prehistory and history this is likely to remain 'in their dreams'. If a man succeeds in bonding with a healthy, fertile woman, his best strategy is likely to be 'don't lose her'.

Other ways of getting a piece of the paternity pie? Spend more time with the kids. Among the Aka, hunter-gatherers of the Central African rainforest, men who have few male relatives tend to have fewer resources. They compensate by playing for longer with children to get into mum's good books. Even male monkeys play with infants, never mind humans who put far more into parenting than any other primate. Transposing the strategies that work in small-scale, evolutionarily typical societies to post-industrial urban landscapes is extremely problematic. But, yes, women burdened with children are not likely to have much time for men with poor job prospects in areas of high, male unemployment unless the men have other attractions. One possibility is quality childcare – playing, carrying, babysitting – as demonstrated by the Aka and men of other kin-based societies. No Darwinian should foster an idea that men are somehow not 'meant' by evolution to be around young children. On the contrary, humans are differentiated from other primates by the extraordinary level of male parenting. Human male strategies are quasi-female by primate standards.

Third and thorniest, the myth of the 'lone mother'. In the recent case of a 12-year-old mother, it turns out her baby boy has a vigorous grandmother of 26 – not so

alone after all. The presence of other close female relatives is not reported, but as it stands, the kinship structure of this household may be typical of human evolution. In evolution, so-called 'single' mothers formed the nucleus of close-knit coalitions of female kin. The most recent heroine of narratives of how we became human is the grandmother. Her strategies forged the peculiar pattern of human life history, with a long span following menopause. By working overtime foraging, providing high-energy weaning foods for her daughter's offspring, grandma enabled her daughter to wean quicker, and have more, well-nourished babies. Grandmothers, in other words, fuelled the evolution of large human brains. Males may have been useful now and then, providing meat feasts on a hit-and-miss basis. But grandma delivered day in, day out. Males could come and go. She could be depended on.

Household composition today in the West is highly variable. But this is nothing new. It has been throughout evolution. I hope Cronin and colleagues will underline in their Darwinian recommendations that there are many ways of making a family. If young women opt to do so with support of female kin, they are following one of the time-honoured paths of human evolution. By no means should they be discriminated against in social welfare policy.

What disturbs us about a 12-year-old giving birth is that a girl can be sexually and physically mature when socially and psychologically she may not be able to cope. In evolution, this would not happen. Fertility is governed by nutritional state. Girls would not get pregnant until late teens, giving them time to learn the social and sexual ropes. The problem arises in our overfed society, because children can become physically mature long before they are socially adult. We experience this as a moral disjunction.

All human societies — by stark contrast with primate societies — place sexual behaviour within some moral framework. The specific version of morality varies enormously between societies. For the Canela, a girl who *won't* have extra-marital sex is considered selfish and immoral. But some collective notion of morally appropriate behaviour exists for all. This is likely to have emerged as a female resistance strategy, with older kin acting to protect young girls from possible aggression by males competing for the most desirable females. Language itself may have arisen as a key mechanism of moral judgement and social control. Robin Dunbar argues that language originated as exchange of social information, or 'gossip', firstly among largely female coalitions and alliances. Topics of conversation have probably not changed over evolutionary time: women bitching about menfolk (useless as usual!) and about women in other coalitions (slappers!).

Models of human evolution nowadays start from a premise of Pleistocene girl power. Female coalitionary action is seen as central in the emergence of uniquely human life history (childhood, adolescence, old age), of large brains, of language, art and symbolic culture — everything it is to be human. The energy-expensive human brain did not triple in size in the 3 million years since 'Lucy' while our female ancestors sat tight on the savanna waiting for the phone to ring. Those ancestors were strategists who manipulated, or, let's say, organised male behaviour using their sexuality and sociality to gain their ends (i.e. feed the kids). They succeeded to the extent that we are here today.

Cronin makes a mysterious statement about women: 'They are the species as it existed before sexual selection drove men apart'. It's hard to know what this means, but I suppose her point is that the past 5-6,000 years of history, in which a minority of men have been able to accumulate excess wealth and resources are, in terms of evolution, a superficial aberration. Does this mean that women's behaviour is somehow more species-typical, that is, more 'human'? So, are rich men, the tiny coterie of capitalists who own, control and dispose of the planet's resources, *not* species-typical in their behaviour? In that case, do working-class people follow more purely human instincts in their social interactions? Is this why *East Enders* and *Coronation Street* ring truer than *Dallas*? Why people jump to reggae, rap and hip-hop all over the world? Why the stinking rich are so lonely and miserable, and why we love to read about it in *Hello!* magazine?

Human nature was not forged in the historic period of social inequality. We evolved in Africa's Rift Valley, in small-scale, face-to-face societies where no one was richer or poorer. Early modern humans had attitude; they demanded respect: 'Don't mess with me! I'm as good as you are.' One of the later Darwin seminars hosted by Cronin at the LSE proved very effectively that people are healthier in more equal societies. I hope she will be passing this on to the Blairites, recommending they tax the rich and pour funds into the NHS, on Darwinian grounds. The fat cats themselves would feel more human. Deep down, we all want 'we ting', to go and wine – non-monogamously – at the Carnival. Back in June, some stressed out City dealers looked eager to swap sides and join Stop the City coalition. It would be good for their, and our, health.

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