

GENDER (SIC) EQUALITY (SIC)

By Martin Sewell

This article is a response to both a Letter to the Editor by Dr Ambily Banerjee (Banerjee, 2007) and the recent UCL Gender Equality Event.

Dr Banerjee claimed to be ‘astounded’ to find a ‘glass ceiling’ (*sic*) within her own discipline, Anatomy. She concludes her letter with, ‘I have never believed motherhood is a valid excuse for not realising one’s potential’. Both points are wrongheaded, and are the result of bogus feminist thinking. Firstly, men and women are different; and secondly, we have evolved ‘as if’ reproduction is the sole goal for which human beings were ‘designed’ and everything else is a means to that end. Feminism not only harms men, but harms women like Dr Banerjee, too (Quest, 1994; Sommers, 1995). Indeed, women are less happy today than they were in the 1970s and ‘the changes brought about through the women’s movement may have decreased women’s happiness’ (Stevenson and Wolfers, 2007).

The UCL Gender Equality Event was held in London on 18 March 2008. There are two things wrong with the title ‘gender equality’; one is ‘gender’, and the other is ‘equality’. Firstly, the term *gender* (as opposed to *sex*) implies that the significant dichotomy among people is socially constructed, rather than biological: this is not science, but politically-inspired nonsense. Males and females are different due to their chromosomes, not their environment. Secondly, things that are different are not equal: to assume equality is false, whilst attempting to enforce it is totalitarian. The core meaning of the term *equal* is a mathematically precise concept that embraces the notion of sameness; in maths, it applies to value, because that is the only attribute that matters, but more generally, it applies to the whole. An apple and an orange that cost the same are of equal value, but are otherwise different, so they are not equal. Men and women do not differ in degree, but differ in kind (Levin, 1987; Geary, 1998; Mealey, 2000; Moxon, 2008). Even at the conference, every single female speaker was either engaged in female-friendly science, or some other female-friendly discipline, which involves either people (the arts, the humanities, the social sciences) or animals (the life sciences).

In order to counter some of the arguments made by Dr Banerjee, and by the speakers at the UCL Gender Equality Event, this article seeks to explain why men are better-equipped than women to do science and engineering, and why there are more men than women in higher offices. The *equality of outcome*,

rather than *equality of opportunity* that Dr Banerjee expected and the UCL Gender Equality Event promoted is—like fascism and Marxism—totalitarian.

Consider a sexually-reproducing species. Assume that there are ‘things’ that are passed on from parents to child, the minimal ‘thing’ will be the unit of inheritance; this is called a *gene*. Every sexually-reproducing organism is the product of its parents, which in turn are the products of their parents, and so on. Therefore every single member of the entire lineage of every sexually-reproducing organism (excepting the most recent generation) reproduced. This creates a massive bias in the genes towards motivating the individual carrying the genes into reaching the age of sexual maturity and successful reproduction; in other words, genes are hugely biased towards survival. In short, the *gene* is biased towards *survival* (Dawkins, 1976), whilst the *individual* is biased towards *reproduction*, see Reeve and Keller (1999). For the individual, survival is irrelevant except insofar as it affects reproduction (Ghiselin (1997) p. 292). Humans have evolved ‘as if’ reproduction was the sole goal for which they were ‘designed’ and everything they do is a means to that end (Williams (1966) p. 59). Our high intelligence does not allow us to transcend our genes (Moxon (2008) p. 275); on the contrary, intelligence better equips us to use the environment to our advantage so that we are better able to achieve—via our prioritized proximate goals of 1) sex, 2) intra-sexual competition, and 3) survival—our ultimate goal of reproduction.

In all species, the relative investment that is made by the male and the female in their offspring determines the degree of discrimination exercised by the individual when selecting a mate; this is known as Bateman’s principle. In humans, females give birth to their offspring, whilst men do not, so females can be expected to be the more discriminating sex. When men and women were asked by total strangers of the opposite sex if they would sleep with them, 72% of the men said yes, whilst not a single woman accepted the offer (Clark and Hatfield, 1989). Females limit the reproductive success of males, and men compete with other men for access to women. Men exist in a dominance hierarchy, whilst women do not; and there is no dominance relationship between men and women (‘patriarchy’ is a myth (Farrell, 1993)). The distribution of men’s mate value has a greater variance and more of a positive skew than the

corresponding distribution for women. The majority of women meet men's criteria, whilst only a small minority of men meet women's criteria (Farrell (1988) pp. 104–105). According to Wirt Atmar (Atmar, 1991), men have evolved to act as 'filters' for genetic material. By stretching them out in a dominance hierarchy, genetic material that enhances the lineage is retained, whilst deleterious genetic material is eliminated from the lineage. Women are the privileged sex (the 'genetic celebrity'), whilst men are relatively expendable. For a readable yet scientific exposition of the relationships between men and women in general, see Moxon (2008).

In addition to having different thresholds, men and women choose mates according to very different criteria. Men desire fertile, non-pregnant and faithful women. Women have a limited period of fertility, so men are attracted to youth, slenderness, beauty and chastity (Buss et al., 1990). Men want (in order of priority): 1) sex with many new, short-term partners, with the hope that other men will support their illegitimate children; and 2) exclusive sexual access to a long-term partner. The only way a man can achieve 1) is to attain status via his rank in the dominance hierarchy, whilst 2) allows a compromise between his status and reliability. A man's rank in the dominance hierarchy is correlated with height, muscularity, broad shoulders, confidence, symmetry, attractiveness, intelligence, wealth, income and willingness to take risks. In this article, the term *status* shall refer to a man's rank in the dominance hierarchy. Women want (in order of priority): 1) a long-term provider/husband who will invest food and care in her children; and 2) a high-status lover who can give those children first-class genes. 1) and 2) can be the same man, but a woman is only likely to achieve this if she is highly desirable (Ridley (1993) p. 244). For long-term relationships, women seek high-status men as a primary consideration, and reliability as a secondary consideration. For short-term relationships, women seek only high-status men.

Evolutionary psychology (Cartwright, 2001; Barrett et al., 2001; Workman and Reader, 2004)—the most popular evolutionary hypothesis for human behaviour (Laland and Brown, 2002)—proposes that human psychology can be better understood in the light of evolution. *Homo sapiens* originated about 200,000 years ago, and natural selection is a slow process, so human beings today are better equipped to solve the problems faced by our ancestors. Humans have spent most of their time on the planet as hunter-gatherers, so that is the environment to which our brains are adapted. To reduce risk, the sharing of meat was widespread among hunter-gatherers. This enabled men to use hunting as a seduction device; proto-men went hunting for meat to offer to proto-women in exchange for sex. For most of their (usually short) adult lives, women would be

pregnant, breast feeding or burdened with children, so were unable to hunt and would instead look for sources that were static, close and predictable. Women gathered tubers, berries, fruits and nuts. Although men likely hunted in small groups, woman went foraging in larger groups than the men, as there is greater safety in numbers. Due to a combination of high intelligence and bipedalism, a large-brained baby can only be passed through a narrow pelvis in a relatively immature and thus helpless state. This implies that human females appreciated paternal support to a greater extent than other apes. They evolved concealed ovulation, which made men continually attentive and encouraged the long-term pair bond. Unlike plant foods, meat is a highly economic food source, so for the sake of reliability, a woman would wish to form a long-term sexual relationship with a good hunter, and keep him to herself. The man can share all his meat with his wife who can share all her vegetables with him. The invention of the long-term pair bond ('marriage') led to the sexual division of labour which enabled humans to eat both meat and vegetables, combining quality with reliability. Of course, many of the details of our past are speculative, and for more on the evolution of our male and female ancestors, see Ridley (1993); Wright (1996); Geary (1998); Miller (2001); Klein (2002); Gräslund (2005).

Men have larger brains than women (Ankney, 1992; Rushton, 1992). A voxel is a three-dimensional pixel and is the smallest unit of volume an MRI scanner is able to resolve. The proportion of grey matter voxels related to IQ is roughly 6.5 times greater in a male brain than in a female brain, whilst the proportion of white matter voxels related to IQ is roughly nine times greater in a female brain than in a male brain. In women, 84% of IQ-related grey matter voxels are in the frontal lobes (the area of the brain involved in reasoning, planning, problem solving, personality, behaviour and emotions), as compared to 45% in men. Even greater sex differences exist in white matter, where for women 86% of IQ-related voxels are frontal, as compared to 0% in men. See Haier et al. (2005). Men have four per cent faster brain nerve conduction velocity (Reed et al., 2004). Female brains average 19.3 billion neocortical neurons, and male brains 22.8 billion, a 16% difference (Pakkenberg and Gundersen, 1997). Women appear to have larger areas of connective fibres between the two hemispheres, making it probable that communication between their hemispheres is facilitated (Kimura, 2000). From the above, one does not need to be a brain scientist to deduce that male and female brains have evolved to be

physically different in form, and thus probably different in function.

Men's minds have evolved to suit the demands of hunting, rising in a male hierarchy and convincing a woman of his reliability. It is likely due to hunting that males have evolved superior spatial skills. Not surprisingly, the largest of the sex differences in specific cognitive abilities is that of targeting (throwing accuracy), and the male advantage over females is approximately 1.5 standard deviations (Hines (2005) pp. 159–160); whilst the male advantage for threedimensional mental rotations is almost one standard deviation (Linn and Petersen, 1985; Voyer et al., 1995; McBurney et al., 1997), and has remained stable from 1975 to 1992 (Masters and Sanders, 1993). Men are better at tests of fluid reasoning (especially in maths and science domains) (Halpern, 1996), and also exhibit greater overconfidence (Barber and Odean, 2001). Baron-Cohen (2002, 2004) posits that the male brain is predominantly hard-wired for understanding and building systems (systemizing), and his definitions of 'systemizing' read like descriptions of science: 'Systemising is an inductive process. You watch what happens each time, gathering data about an event from repeated sampling, often quantifying differences in some variables within the event and their correlation with variation in outcome. After confirming a reliable pattern of association – generating predictable results – you form a rule about how this aspect of the system works. When an exception occurs, the rule is refined or revised; otherwise, the rule is retained.' (Baron-Cohen, 2002) and engineering: 'Systemizing is the drive to analyse, explore and construct a system. The systemizer intuitively figures out how things work, or extracts the underlying rules that govern the behaviour of a system. This is done in order to understand and predict the system, or to invent a new one.' (Baron-Cohen, 2004). Women's minds evolved to suit the demands of bearing and rearing children, and of gathering plant food in groups. Females consistently surpass males in recall of the locations of objects in a spatial array (Silverman and Eals, 1992; Eals and Silverman, 1994; McBurney et al., 1997), and have superior spatial memory and navigation skills in response to fruits, vegetables and other traditionally gatherable sessile food resources (New et al., 2007). Women access information that is held in long-term memory more efficiently and more quickly than men (Halpern, 1996), and women are more verbal, observant, meticulous, industrious (Ridley (1997) p. 95), and are better judges of character (Moir and Jessel (1992) p. 19). Baron-Cohen (2002, 2004) concludes that the female brain is predominantly hard-wired for empathy. The evolution of the differences between male and female cognition is likely due to sexual selection (Geary, 1995; Sherry and Hampson, 1997; Ecuyer-Dab and Robert, 2004). For more on the cognitive differences between men

and women, see Moir and Jessel (1992); Kimura (2000); Halpern (2000); Hines (2005); Hamilton (2008).

The high intelligence of humans is likely the result of sexual selection (Miller, 2001); females selected males for their high intelligence, and their ability to do so ensured that they were never far behind. The distribution of male IQ has both a greater mean (around 2 IQ points (Sewell, 2007)) and (in common with many other attributes) a greater variance (Feingold, 1992) than the female distribution. The combination of the two translates into an increasingly large proportion of men as one traverses the upper tail (Hedges and Nowell, 1995; Nyborg, 2005; Deary et al., 2007), so we would expect more men present at the highest levels. Indeed, there are twice as many men with an IQ of 120-plus as there are women and 30 times the number of men with an IQ of 170-plus as there are women (Irwing, 2006). Students achieving a score above 700 on the American Scholastic Aptitude Test (Mathematics) consist of 93 per cent males and only 7 per cent females (Benbow and Stanley, 1983). Whilst the incidence of mental retardation (an IQ of 70 or below) is higher among males, the male:female ratio is approximately 1.4:1 (Kiely, 1987). Men receive more first-class and third-class degrees, whilst women receive more upper seconds (McNabb et al., 2002).

As discussed above, women assess men according to their status. In order to attract a high-value mate, men have to compete with other men for status and this translates directly into men contesting each other for positions within organizations, whilst there is no parallel for women (Moxon, 2008). The most significant sex difference of all is that of motivation (Baumeister, 2007; Moxon, 2008). Competition improves performance relative to a non-competitive environment for boys, but not for girls (Gneezy and Rustichini, 2004). Catherine Hakim's 'preference theory' (Hakim, 2000) argues that women choose between three different lifestyles: work-centred, home-centred, or adaptive, depending on their priorities. Up to two thirds of all women are adaptive, and prefer to combine employment and family within their lives without giving a fixed priority to either. A British survey of 1807 randomly selected women aged 16 and over, carried out in 1999, found that just 14% of all women—and merely 24% of full-time female workers—are work-centred (Hakim (2003) p. 85). Even the members of this small subset are differently motivated from men. They work not to compete for the status that organizational positions provide men, but merely to be close to and in the path of high-status men (not that they are necessarily conscious of doing this, it is simply a

consequence of how they have evolved) (Moxon, 2008). Helen Farmer (Farmer, 1985) states that 'homemaking commitment was negatively and significantly related to long-range career motivation for young women, but not for young men. It appears that for young women with high homemaking commitment there is a dampening effect on their long-range career motivation, but for young men such commitment may coexist with high career motivation.' Women are assessed according to youth and beauty—top women models earn about five times more than their male 'equivalent' (Farrell (2005) p. 197)—so to compete in a work environment would be pointless. Catherine Hakim (Hakim (2004) p. 201) summarizes the consequences of the differences between the sexes vis-à-vis motivation:

Most men have little choice in how to spend their lives, being forced into the full-time continuous life-long employment career whether they like it or not, whether they take on the breadwinner role for a wife and children or not. Public disapproval for the househusband role is reflected in a status score so low that it scrapes the very bottom of the prestige scale, whereas the housewife's score is right in the middle of the scale. Women can choose to drop out of the labour market and become homemakers, full-time or in combination with a part-time job, and retain a social status not very different from the status of typically-female occupations in the market economy (such as secretary), or else they can rely on the borrowed glory of their husband's social status, as most women do. No such choice is open to men.

Sweden is ahead of any other country in taking measures to reduce the pay gap. Politically correct Sweden introduced family-friendly policies designed to get women into work. Most women aren't career-oriented, so end up in poorly paid work, which drags down the average female wage. In Sweden, the pay gap bottomed out in 1981 at 18%, and by 2000 it had risen to 21% (Spånt and Gonäs, 2002). Feminism fails in both theory and practice. 'Apart from the creation of a segregated part-time workforce, there have been no substantial changes in the level of female employment for over 150 years' (Hakim (2004) p. 2). Now we know why men, and not women, get to the top. But is the status quo ideal? Yes, it turns out that both men and (especially) women prefer to work for a male boss (Hakim (2004) pp. 109–113).

As explained above, males, as compared to females, have: i) brains that are better equipped to do science and engineering; and ii) a motivational set that is conducive to competing in a workforce. Within academia, this clearly translates into a male advantage: i) in science and engineering faculties and ii) in senior (e.g. professorial) positions. In Britain, in 1992, 93% of science and 96% of engineering faculty members were male, whilst across all disciplines, 95% of professors

were male (McNabb and Wass, 1997). McNabb and Wass (1997) analysed statistics for 1975, 1985 and 1992, and noted that although the proportion of women across all ranks and in all faculties increased, 'traditional patterns of inter-rank and inter-faculty gender distributions, in which women are disproportionately under-represented in senior positions and in science and engineering disciplines, have, for the most part, remained throughout this expansion'. Women are not only under-represented in science but, on a per capita basis, produce less than their male counterparts (Cole, 1981). The evidence that men are more productive than women in academia is persuasive (the difference is in quantity, rather than quality of publications (Over, 1982; Long, 1992). Cole and Zuckerman (1984) report that 'more than 50 studies covering various time periods and fields of science report sex differences in published productivity, more specifically, that men publish more than women, even when age and other important social attributes are taken into account. Moreover, gender differences in publication rates appear to have persisted for decades'. Quoting Zuckerman (1991), 'when it comes to rates of publication, more than 50 studies of scientists in a variety of scientific disciplines, types of institutions, and different countries show that women publish fewer papers than men of the same ages, on average, 50–60 percent as many'. Long (1992) states that 'the lesser productivity of females has been established in dozens of studies covering diverse fields, spanning decades, and using a myriad of measures'. Men are more productive than their female colleagues at each status/salary level, as measured by a number of research publications and citations (Over, 1982). This finding holds true even for unmarried, childless women. In other words, women may already be over-promoted. When the Association of University Teachers in Britain reported that women lecturers were discriminated against as regards salary and status, they were able to do so only by excluding all measures of productivity (Association of University Teachers (AUT), 1992). In 1979, Cole found that after twelve years the average male scientist produces eight papers, whilst the average female scientist produces only three (Cole (1979) p. 63). Cole and Zuckerman (1984) found that women publish slightly more than half (57%) as many papers as men. Xie and Shauman (1998) discovered that sex differences in research productivity declined from 60 to 65 per cent in 1969 and 1973, to 75 to 80 per cent in 1988 and 1993. Across disciplines, women pursuing an advanced degree take, on average, significantly longer to finish than their male peers (Das Gupta, 1997). Beverly Steffert (Steffert, 1991) found that female students in a

Department of Psychology took, on average, twice as long as males to complete funded PhD degrees (despite gaining more help from staff members with matters such as statistical analysis). Interestingly, those who were highest in femininity, according to Bem Sex Role Inventory scores, were the least likely to finish. Ironically, the tiny number of Nobel Prizes awarded to women in the physical sciences were awarded before the late 1960s, i.e. before the second wave of feminism. Universities have for a long time functioned as very effective 'finishing schools' or 'marriage markets' for female students and staff, as academia is a good source of intelligent and reliable men. Men become academics in order to attain status, whilst women join academia in order to put themselves in the path of high-status men (neither sex are necessarily conscious of such ultimate causes of their behaviour, evolution requires only that we are aware of our more proximate motivations). A study of biochemists (Long, 1992) found that female academics were much more likely to collaborate with a spouse (with more men than women in the discipline, this is inevitable).

It was explained above that due to Bateman's principle, women are the privileged sex (the 'genetic celebrity'), whilst men exist in a dominance hierarchy and are relatively expendable. This simple biological fact has an enormous impact on all (past, present and future) societies. Actually, a small minority of men (those of high status)—and all women—are privileged, but the small minority of men who are privileged have to work hard to attain their status. In order for cooperation to have stabilized, humans evolved cognitive mechanisms that allowed them to detect deception related to cheating in resource exchange and mate selection criteria (Cosmides, 1989). As ever, sexual selection dominates proceedings, so cheater detection evolved primarily to enable both men and women to police tactical subversion of the dominance hierarchy, i.e. keep lower-ranked men 'in their place' (Mealey et al., 1996; Moxon, 2008). Females seek only a minority of males at the top. The upshot of this is that women have an inherent prejudice towards most men. Women will only mate with high-status men, or men who have taken the time to show their reliability, a process which may even involve marriage. Indeed, experiments on in-group bias concluded that *women like women 4.5 times more than men like men* (Rudman and Goodwin, 2004). No normal man hates women, whilst misandry (hatred of men) is a common prejudice of women and not just feminists (see, for example, Nathanson and Young (2001)), and it is such misandry that led to the invention of 'misogyny' and feminism (feminism is not progressive, it is ultraconservative). Feminists use the myth of 'misogyny' to excuse their misandry. Men have harder and often dangerous jobs, work longer hours, commute further, have greater responsibility and are more productive than women,

and the 'pay gap' between the sexes, with women earning 80% of what men earn, is actually too small, and indicates sex discrimination *against men* (Farrell (2005) ch. 11, Moxon (2008) p. 139). Riach and Rich (2006) made bogus job applications for various vacancies in central London that were identical except for the sex of the applicant. The four occupations chosen for the study were engineer (electrical and mechanical), computer analyst programmer, trainee chartered accountant and secretary. More men than women were discriminated against across the entire male-dominated work to female-dominated work spectrum. In the case of the programmer, 14 candidates received equal treatment, 4 females were discriminated against and 16 males were discriminated against. Even in a high-status, male-typical vocation, there was more anti-male discrimination than anti-female discrimination by a massive factor of *four*. Such discrimination against men in a male-typical profession is actually even worse than it appears. Taking into account the group someone belongs to is Bayesian reasoning (i.e. probabilistic logic, see Lindley (1972)) (Miller, 1994), so it is perfectly rational, although generally illegal, to use such information during personnel selection.

By appealing to nature, I could stand accused of committing the 'naturalistic fallacy', but our motivational set is not negotiable, we cannot transcend our genes (witness the failure of Communism), so social justice should always be rooted in biology (for that is all we have). The minds of men and women have been formed by the processes of natural selection, the most significant aspect of which is sexual selection, whereby each sex shapes the other. The hunting/gathering division of labour resulted in men being better-equipped to do science and engineering, and women being better at empathising. Men are assessed according to their status, so in order to attract a high value mate, men must compete with other men for status. They do so by contesting each other for positions within places of work, and as a result they rise to positions of seniority. There is no parallel for women. The fact that women are the more discriminating sex led to the most disadvantaged members of society being the majority of men, and thus feminism is the antithesis of social justice. The sexual division of labour exists because men and women are different (Levin, 1992), so enforcing (or even encouraging) the

proportion of men and women in work places to be equal is totalitarian (Quest, 1992; Lawrence, 2006); that is exactly what Ambily Banerjee expected and the UCL Gender Equality Event promoted.

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*Ph.D. Candidate, Department of Computer Science
UCL*

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