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MUSEUM OF OLD AND NEW ART

STORY OF A GIRL

ELIZABETH PEARCE

The point, then, without doubt, is to change the world. But how?

—ROSS CHAMBERS

Is art an adaptation? Each of our four guest curators has a different answer to the question. But they share a common refusal of the assumption that art is a purely cultural phenomenon. That, to me, is the point of this exhibition.

In every realm—the review, the essay, the family in the gallery—art is viewed from an invisible, and therefore unassailable, position: art is cultural. This is barely seen as 'a position' at all, let alone called upon to defend itself. It is for this reason that we (Mona's core curatorial team, led by David Walsh) see ourselves as advocates for an alternative, bio-cultural view: that which considers both local, conscious ('proximate') reasons for creating and consuming art, as well as deeper, biological, ('ultimate') ones as well. We want to drag the cultural assumption into the light, even if we fail to dislodge it. Everyone knows art elicits strong emotion. People love some works of art, and love to hate others. But why? The 'proximate' account produces statements like: 'Her mother taught her to paint,' 'He wanted to capture a modernist sense of time in sculptural form,' or 'I like looking at pictures of landscapes.' These things matter, and form the formidable font of knowledge we call art history. But they are only part of the story. An 'ultimate' view asks why the will to create and to look at art exists in the first place. Why does it persist in the human species, in all known cultures throughout our history? Why does it develop spontaneously in children, without them being taught? Why does art feel good, certain images and patterns give us pleasure (and, conversely, why do we react so strongly to art we do not like)? Evolutionary biologists usually look at pleasure as an indicator that something is useful to us, in the sense that it helped our ancestors survive and procreate—like eating, sex, and looking after children. Those who did these things lived long enough to produce healthy offspring, thereby spreading their genes into future generations. So what about art, then? What is at the heart of that pleasure—what function might it serve? Or, more accurately, what function might it have served at the time the first psychologically modern humans were evolving?

Proud Mary 2007 (still)
2007 and ongoing, every five years
Daniel Mudie Cunningham

These sorts of questions are alien to people like me—non-scientific, but otherwise educated and tuned in to social-justice matters (bleeding heart lefties with arts degrees). This is because outside science, the default view is that we do the things we do because we've been socialised that way. We care for children because it's the social expectation, we express our sexuality in ways appropriate to learned gender roles, and we make art to carry on a cultural conversation. These things are almost certainly true but they fail to take into account the fact that our minds, as much as our bodies (which is, of course, a false divide), have been shaped by natural selection, and that we come into the world carrying the legacy of thousands of generations of our hominid ancestors. Look, I know you know this. You did grade seven science. But have you really let it sink in? You will need to surrender, just to start, the sense that your conscious 'I' is all there is to you, and accept that your deep motives may not always be apparent. Even Richard Dawkins struggles: that we are 'survival machines … programmed to preserve the selfish molecules known as genes', he writes in the preface to the first edition of *The Selfish Gene*, 'still fills me with astonishment. Though I have known it for years, I never seem to get fully used to it.'[1] So many of our daily assumptions hinge on the modern equivalent of John Locke's *tabula rasa* (blank slate).[2] We are born blank, and society writes upon us. As babies our parents create our character, and then culture finishes the job. The blank slate, according to Steven Pinker, is 'the secular religion of modern intellectual life'. It provides the bedrock for many social values, and so 'the fact that it is based on a miracle—a complex mind arising out of nothing—is not held against it'.[3] Even in an era when Darwinism has some buzzword cachet—David Denby wrote in 1997 that it was 'replacing Freudianism as an intellectual hobby'[4]—most people don't accept biology as a shaping force in their own lives, beyond the fact that they 'eat, sleep, urinate, defecate, [and] grow bigger than a squirrel'.[5] The notion that our behaviour has anything at all to do with genetic inheritance still sits oddly in polite intellectual society (my friends look at me weirdly) and, occasionally, can shock, as evidenced in the vitriolic reaction to any attempt to discuss innate sex differences between men and women. I had never, prior to working for Mona, thought biology had anything to do with art. Like a pebble in a landslide, that idea sets forth a chain reaction, a series of moral, personal and political implications I cannot just float over, that I have to find a way through. What does the notion that my mind—the seat of my 'self'—is the outcome of evolution mean for my personal identity, the way I live my life, and my image of how I want the world to be? At one point during this whole process, Mona co-director Nicole Durling said, 'This exhibition has changed the way I think about art'—which is a pretty significant thing for the director of an art gallery to say. I can go her one better. This exhibition—which has been coming since Mona's inception—has changed the way I *think*. I want to tell you why.

I am a professional writer with a background in feminism and postcolonial literature (which basically means I analysed the way women and non-western people and cultures are represented in fiction). I was hired by David as a kind

1 Richard Dawkins, *The Selfish Gene*, 30th anniversary edn, Oxford University Press, Oxford, 2006 (1989), p. xxi.

2 As Pinker points out, Locke actually used a slightly different metaphor, that of 'white paper void of all characters'. See Steven Pinker, *The Blank Slate: The Modern Denial of Human Nature*, Penguin, London, 2002, p. 5.

3 Steven Pinker, *The Blank Slate*, p. 3.

4 David Denby, 'In Darwin's wake', *The New Yorker*, July 21, 1997, p. 52.

5 Steven Pinker, *The Blank Slate*, p. 124.

Pupa
2005
Fiona Hall

of in-house art critic—he wanted someone on the team without a background in visual art, to look at the stuff in his gallery with fresh eyes. My 'fresh eyes', however, were clouded by a postmodern world view. The term 'postmodern' can mean many things. But I use it here to mean that nothing is 'true' in an objective sense. All experience is filtered through language, and language is weighed heavily with ideology. In speaking and writing, we don't reflect reality, we create it. Not only is it hopeless to get to the truth, it is wrong to even try, because to do so is to forget that truth is constructed by those in power, to further their own ends. The proper object of study is these 'constructs' themselves, also known as 'discourses' ('ways of speaking about'). For me, this meant decoding the ideological messages implicit in literature, and using this as a starting point for advocating change.

That we are blank slates at birth was intrinsic to my discipline: we weren't just written *on* by culture, we were written *into* being. An evolutionary account simply does not make sense in this context. It also seemed to run counter to our social-justice agenda. In the wake of Darwin's elaboration of the theory of evolution, natural selection was promptly misread as 'survival of the fittest', also known as Social Darwinism: the justification of social inequality. This is the 'naturalistic fallacy', as Peter Singer shows; the misbelief that if something is 'natural' that somehow makes it 'right'. Social Darwinism leverages off this confusion, wrongly ascribing a human, moral meaning to a mindless natural process. (It is for this reason that Richard Dawkins came to regret the title of his *Selfish Gene*, because it encouraged a misunderstanding that because our genes behave 'selfishly' that means we are selfish people, too). There are plenty of things that are 'unnatural', such as curing diseases, that are obviously not wrong. This is also true in reverse. Take, for instance, the theory that racism stems in part from an evolved preference for one's own group. This idea is separate to, and cannot undermine or threaten, our modern, enlightened notion that racism is wrong. The suggestion that any common tendency has a biological basis in no way justifies that tendency. On the contrary, says Singer, this knowledge is cause for us to be more suspicious of that tendency, to work harder to assess it in a moral context.[6]

Before we can look clearly at the role of evolutionary theory, Singer argues, we need to keep our 'values' separate from our 'facts'. It is not the job of science to generate morality. The job of science is to generate knowledge, using the best-known methods available; it is up to us, as a morally conscious species, to decide what to do with that knowledge. 'Scientific statements of facts and relations,' said Einstein, 'cannot produce ethical directives.' There is no need, then, for blank-slaters to defend themselves against apparent 'natural' inequality, because the value of freedom and liberty for all—to paraphrase Jesus, to treat other people how you would like them to treat you—is enshrined as moral law in our species.[7] This is a result of what Singer calls the 'expanding circle': our increasing capacity, throughout human

6 Peter Singer, *The Expanding Circle*, Princeton University Press, Princeton, NJ, 2011 (1981), p. 71.

7 There is a vast body of literature dealing with the issue of evolution of morality and altruism in the human species. You could start with Robert Wright's *The Moral Animal*, Vintage, New York, NY, 1994.

history, to widen our circle of empathy to include people who do not share our immediate interests. We might ask—with increasing fervour with the advent of modernity and its capacity to bring us close to all kinds of difference—how to 'change the world', but that is not the job of science proper. That doesn't mean individual scientists don't care a great deal about this; it simply means their 'values' do not contaminate their method for generating 'facts'.

But as the twentieth century unfolded, Darwinism seemed counter to the spirit of the times, which was characterised by a desire to extend our concept of who was properly human, and properly deserving of human rights, to include all people—black, female, gay—and to celebrate alternative, non-western ways of life. European empires crumbled and previously oppressed groups asserted their freedoms the world over, giving rise to a radical form of cultural relativism—the belief that there is no objective standpoint from which we can judge the ethics of any given behaviour, and that so-called 'human nature' is nothing more than an arbitrary assemblage of roles determined by the power struggles of late western capitalism. Around this grew up the academic traditions in which I was schooled. Over the course of my education, literally the only time Darwin's name was mentioned was to highlight the woes of Social Darwinism: the belief, as outlined above, that oppressed people deserved what they got because they were biologically inferior. Social Darwinism is, indeed, woeful, and needed to be discredited. But to throw Darwin out alongside it is a kind of crime against knowledge, the implications of which are only just starting to sink in for me. Instead, my education focused on the manner in which cultural codes, and especially language, create our identity and the unequal power relations between us. Change the code, the argument goes, and you can change us, our so-called human nature. Evolutionary biology seems anathema to this view in two ways: not only because it appeared to close down definitions of humankind just as they had finally begun to open up, but also because the discipline of science itself was seen as part of the project of western imperialism: to describe and contain the world according to its own ideological agenda.

For science, 'progress' means that good technology and sound theories cross-pollinate and spawn better technology and even stronger theories. But in my field the notion of 'progress' was innately patriarchal and imperial, indistinguishable from the march of empire and the suffering it left in its wake. Again, this was important work: we needed to renounce and attempt to reconcile the injustices of our colonial past; that urgency is felt nowhere more strongly than here in Tasmania. But in the process, knowledge itself was called into question. This is exemplified by the work of French philosopher Michel Foucault, whose influence on twentieth-century social science ranks alongside that of Marx and Freud. With Foucault, we saw that shift towards 'discourse' studies that I outlined above, as well as its political offshoots: the seminal postcolonial text *Orientalism* by Edward Said, which critiques the west's construction of its eastern 'other', and the work of hugely influential gender theorist Judith Butler. Butler is a key proponent of the kind of feminism that sees our sex (whether we've got girl bits, boy bits, or something in between) as having no genuine relation to our gender (our sense of being masculine or feminine) or our sexuality (who we like to have sex with and how). Culture has created a false relation between these three points of identity, making it seem like one determines the other. Not only are the categories 'man', 'woman', 'gay', 'straight' and so forth not innate, Butler argues, they barely even exist as social constructs, but only as a series of 'effects', a kind of performance that is unfolding all the time. Forget the blank slate, this is barely any 'slate' at all. Like a religion, Butlerism takes absence of evidence as a test of one's faith, and her

theory is answerable only to itself. (Why is God? Because He's God.) 'No one really is a gender from the start,' she says. 'I know it's controversial, but that's my claim.'[8]

The problem isn't that her claim is controversial, but that it's wrong. Sex, gender and sexuality are expressed in humans, and in other species, in ways that can be dazzlingly diverse, as Joan Roughgarden has shown.[9] That doesn't mean there's no biological core, but rather that biology itself is variable, and that it interacts with culture and socialisation in unpredictable ways. This isn't just 'a claim', it's a hypothesis that has been verified by a number of intersecting scientific disciplines. The details are debated of course. But for our purposes, what matters is that there are key aspects of our identity, including our gender identity, that are not a result of our upbringing or of our internalisation of culture, but that are strongly shaped by genes, hormones and the brain. Many traits are gender-neutral, so to speak. But there are some that can be seen the world over, statistically to a very large extent, in more women than men, and vice versa. To qualify as characteristically 'male' and 'female', these traits must be traced to the genetic differences between the sexes that unfold via hormonal influences on the brain, before birth; they must be apparent in test conditions that isolate them from cultural influences; and they must make sense in accordance with our evolutionary history. So, first: the brains of men and women differ visibly in many ways. Corrected for relative body size, women have more grey matter and a thicker cerebral cortex. Women show stronger connectivity in the left brain, men in the right (running counter to popular stereotypes about logical men/emotional women). The male amygdala is relatively larger and dotted with testosterone receptors, while the prefrontal cortex, the part of the brain that inhibits aggression, is larger and develops earlier in women … and so forth.[10] 'Learning and socialisation can affect the microstructure and functioning of the human brain, of course,' says Pinker, 'but probably not the size of its visible anatomical structures.'[11] These structures are laid down in the womb. As Melvin Konner explains, the default plan for the human body is female.[12] At conception, the chromosome structure of the fertilised egg (usually XX or XY) dictates whether or not the child-to-be is bathed in male hormones, body and brain, setting it on the path towards male or female development. There is a large body of data that shows, using studies on our close primate cousins and all sorts of other animals, that variation of sex hormones in utero has an impact on behaviour in three key areas: aggression, sexual activity, and response to infants. If this hypothesis is correct, and pre-natal hormone exposure really does impact our behaviour along sex-differentiated lines, it should be confirmed by the testimonies of people who are born with atypical sexual biology and/or chromosome structure—and mostly, it is. As is so often the case, the exceptions prove the rules. For instance, people who are XY and therefore technically male, but who lack the usual male hormone receptors, grow up to identify as women. Similarly, XY people born without penises for whatever reason, and who were surgically altered and raised as girls, have testified to feeling out of sync their whole lives, with many eventually recovering their original male identity. Butler, Foucault and co. treat such cases as proof of the variability of gender—and they're right, but not to the

8 Judith Butler, 'Your behavior creates your gender', Big Think video, https://www.youtube.com/watch?v=Bo7o2LYATDc

9 Joan Roughgarden, *Evolution's Rainbow: Diversity, Gender, and Sexuality in Nature and People*, University of California Press, Berkeley, CA, 2004.

10 Melvin Konner, *Women After All: Sex, Evolution and the End of Male Supremacy*, W.W. Norton and Company, New York, NY, 2015, p. 229.

11 Steven Pinker, *The Blank Slate*, p. 347.

12 Melvin Konner, *Women After All*, p. 29.

Formations of Silence: Freudian Flowers
2009
Juz Kitson

extent that gender stands free from biology, and certainly not that it is arbitrary, a role assigned to us in a patriarchal plot. The research shows a clear role for culture—but we accept this already. What we struggle to accept is that we are, to a large extent, 'a gender from the start' (whatever gender that happens to be). And the reason for this, in terms of our evolutionary history, comes down to something called 'sexual dimorphism', a characteristic of all species that reproduce sexually (I'll come back to that in a minute.)

Now, most people don't read Judith Butler, and most are willing to tolerate the notion that there is something essentially masculine or feminine about a person that stands clear of cultural input. But again, this seems to stop at the neck: we accept babies come from women's bodies, and that men have—you know, bigger muscles, or whatever. But en masse we are unprepared to follow through the logic of these obvious physical differences, and to consider that the mind, like the rest of the body, has been shaped by hundreds of millions of years of evolution. The idea that the sexes might have characteristic traits and markers of identity is not only unpalatable, it actually logically contradicts the main premise of mainstream western feminism: that men and women should be interchangeable. Any difference between them—in the sorts of jobs they choose, the way they interact with other people, and the extent to which they assume responsibility for childcare—is 100 per cent due to socialisation and culture. No reasonable person would suggest that the way we are socialised does not have a significant role to play, or that women are not held back by barriers hidden and overt, or that they are sometimes, or often, unfairly weighed down by the burden of childrearing. We are in the very early stages of undoing millennia worth of damage to the status of women and to their self-image, as a result of pernicious lies about their natural inferiority—lies that were used to justify violence and coercion, and that prevented them taking full part in the creative ingenuity that makes our species unique (although they had a fair crack at taking part, regardless; achieving acts of greatness 'with one hand tied behind them', as Konner puts it).[13] These lies stemmed from a desire to control female reproductive capacity (something we see today as part of the abortion debate) and they were enforced by physical and institutional oppression. This history of oppression is still with us, literally: in the many parts of the world, including pockets of our own, where the expanding circle is yet to sweep. Here, poverty and violence, access to education, and control of one's own body are daily concerns for women and girls. Nevertheless, I've long been perplexed by the notion that here in the west, in my privileged little world, we've not made much progress, and that we are just as downtrodden as we always were. How can this be, when I look around me and see increasing numbers of women enjoying the full spectrum of their fledgling human status, asserting themselves in jobs they enjoy and in respectful relationships; travelling, having children or not according to the balance of their desires? This rosy picture is at odds with the statistics that show men and women are not sharing equally the spoils of western capitalist society. Women are more likely to be part-time and casual workers, and they spend more than twice as many hours looking after children. They are significantly under-represented at managerial and CEO level,

13 Melvin Konner, *Women After All*, p. 208.

contributing to a gender pay gap, in this country, of 18.2 per cent.[14] In my own industry, the ratio of male to female artists represented in galleries is especially fraught. I recently heard about a gallery that has decided to hang exactly 50 per cent male and female art. Mona is certainly no better than any other; this very exhibition is curated by four men.[15] Today, the day I happen to be writing this bit of my essay, an *Age* Facebook post shared an *Elle* campaign called #morewomen. The campaign shows images of people working in different industries with the men photoshopped out, leaving—for instance—Lena Dunham standing alone on a TV production set, and two female politicians in an empty room. My problem was *The Age*'s Facebook heading: 'The gender gap is real. Here's the proof.' The gender gap is real. But counting numbers of men and women carrying out any one activity is not 'proof' that gap is purely the result of a sexist culture. This logic falls down on a very simple point, something we might learn in grade seven science: it does not take into account other variables. The one, screamingly obvious, yet somehow also shocking variable: that men and women are different, on average, in some areas of their nature, and that this impacts their choices and behaviour, in ways that cannot be explained away by socialisation and culture.

Artifact
2010
Gregory Barsamian

I first encountered this idea in Dawkins' *Selfish Gene*, and I simply dismissed it, not on the basis of its merits, but because it was offensive to me. I filled the margins with notes like 'Horrifyingly sexist!!!' (original punctuation retained). 'He completely denies the performative aspects of gender, and treats language as a transparent window to biological reality!' Basically (if that makes no sense to you at all) I was doing a literary 'reading' of Dawkins' work, focusing on the language and not the ideas. This is a classic move in my discipline, as seen in Butler and co., who defuse sex-difference research by 'reading' it as 'discourse', upholding the postmodern axiom that ideas do not have veracity beyond the words used to convey them. I see this, too, in the recent trend towards literary Darwinism, and otherwise laudable attempts to take into account our changing place in nature and mistreatment of other animals. These changes do not break the tide of assumption that sweeps the humanities to its conclusions. In fact—to borrow words from the strange and wonderful physicist David Deutsch—they are making a bad explanation worse,[16] in the sense that their superficial changes distract from deeper problems with the discipline. Darwin's name is at last being mentioned in humanities departments, but only insofar as literary analyses of *On the Origin of Species*. In upholding blank-slate assumptions of our nature, these critics cement the false divide between humans and other animals, while trying to do precisely the reverse. This is not a halfway point, a meeting of the disciplines, but a gesture at change that only strengthens the status quo. ('I watch the ripples change their size,' sings David Bowie, 'But never leave the stream of warm impermanence.') The work of these literary critics bears no resemblance to the truly interdisciplinary approach of Brian Boyd and a handful of others. Boyd's book *On the Origins of Stories*—which David Walsh asked his entire

14 Australian Human Rights Commission, 'Face the facts: gender equality', https://www.humanrights.gov.au/face-facts-gender-equality

15 Women we canvassed include Ellen Dissanayake, Joan Roughgarden, Leda Cosmides, Sarah Hrdy and Margaret Atwood. (Only after it was too late did I come to the work of Helena Cronin.) Each fell through for various reasons, if by 'fell through' you mean—in the case of Margaret Atwood—'didn't answer our emails'. We also spoke with Germaine Greer at one point, but found that the differences in our points of view were too great to be surmounted.

16 David Deutsch, *The Beginning of Infinity: Explanations that Transform the World*, Viking, New York, NY, 2011, p. 22.

curatorial team to read some years ago—was the catalyst for our exhibition, hence the double homage of our title.

I was angry with Dawkins (and I still am, really: how dare he!) but something was sinking in. I see in my copy of *The Selfish Gene* that I'd also underlined the words: 'it is possible to interpret all the other differences between the sexes as stemming from this one basic difference'.[17] He was talking about male and female sex cells, the animal kingdom over, and the fact the female's are larger than the male's. There it is, that ancient, systemic difference between men and women. Not so for race: I was taught that race and gender were mutually embracing in their otherness; but this is not the case. There's not a great deal of difference between black and white, biologically speaking.[18] But between the sexes, there is. Of course there is, it's bloody obvious. It's obvious now, at least. Back then, in my early days at Mona, I was a long way (and considerable pain) from that conclusion. I was grappling with the first in a chain of realisationsthat stemmed from Dawkins' dangerous ideas, about the nature of ideas themselves. That the world isn't necessarily the way I want it to be. That no matter how much I want something to be true, that doesn't make it more true, nor less. That 'true' means something independently of me. That 'a proposition does not accrue merit in proportion to its desirability'.

That's a quote from my boss David Walsh and he said it to me when I first started working for him. He had showed me an essay he wrote in which he put forward an argument for art as part of a mating strategy on behalf of males to attract the attention of females. (This is, of course, a simplified version of Geoffrey Miller's argument, see page 163. Miller has always taken female creativity into account as well, but he has recently shifted much further towards a 'mutual-mate-choice model'—creativity as a form of men and women 'showing off' to each other.) 'As peacock feathers make peacocks more likely to reproduce by making them more attractive,' David wrote (this was in about 2008), 'so the human brain, through the vehicle of art, makes the artist more attractive. Selection pressure selects more creative individuals to reproduce and evolution creates more artistic brains.' I responded with outrage, personal offence. I printed in red pen across the offending section: 'I just want to officially register my profound objection to this paragraph.'

Let me explain.

When full-scale sexual reproduction emerged eight hundred million years ago, sexual organisms needed to specialise: to divide their reproductive investment between competing for mates on the one hand, and caring for offspring on the other. Thus began 'sexual dimorphism', a great divide into 'fat, resource-laden eggs' and 'slim, streamlined sperm', a divide that became self-reinforcing over evolutionary time, and that is reflected 'in every sexually reproducing species that has ever existed'.[19] The female egg is large, singular and expensive, like a diamond. The male sperm: multiple, cheap and dispensable, like, um, sultanas. This promotes different mating strategies: quality for the female, quantity for the male. Females are the limiting factor: they are careful with their one, prize egg, protecting it from the prolific, trigger-happy males, spraying sultanas all over the place. As a result, males compete for the attention of females; sexual selection has favoured males who are prepared to 'show

17 Richard Dawkins, *The Selfish Gene*, p. 141.

18 Steven Pinker, *The Blank Slate*, p. 143.

19 Helena Cronin, 'The battle of the sexes revisited', in *Richard Dawkins: How a Scientist Changed the Way We Think*, Alan Grafen & Mark Ridley (eds), Oxford University Press, Oxford, 2006, p. 17.

off' at all costs. More than females, they strive to be 'the biggest, brightest, brashest, and best'.[20] They are more likely to compete 'using violence or occupational achievement' and to 'risk life and limb for status, attention, and other dubious rewards'.[21] They spend less time on childcare and 'vast quantities of time, energy, and resources just strutting their stuff—singing, dancing, roaring; flaunting colours and iridescence; displaying tails and horns …adaptations in glorious profusion'.[22] To this, Miller would add making art.

I'll put it this way. There are many features of our nature that are the outcome of the sexes' complementary divide. Is art one of them? Boyd doesn't think so. He thinks art is much more about our (adaptive) proclivity for pattern, and our thirst for status and attention. Pinker doesn't agree with either of them—he thinks art is a 'pleasure technology', something we invented to stimulate our senses. And Changizi? Changizi gives us something different. He reframes the culture–biology dichotomy in a way that—if I'm honest—I'm not ready for. I need to assume that at some point, some point soon, I will look at all this with different eyes, that I will know more as a result of having come into contact with the different ways other people make sense of the world, in books and conversations. I'll come back to Changizi's ideas then, and think them through again.

For now I'm coming to terms with that primal fact, our difference. And in doing so, I keep Singer in mind. The point, of course, is not to justify inequality, but to work towards recovery of a 'whole woman'—to borrow a metaphor from Germaine Greer—undistorted by millennia of sexist myths. No mean feat. Both the goal and the impetus is the removal of barriers to female influence in the top tiers of political, economic and creative endeavour. This is a work in progress, one that cannot be fixed with the flick of a 50:50 wrist. Honest changes lead to a slow groundswell of confidence and acceptance, mutually reinforcing each other, leading to lasting change. To help this process it is important, I believe, to normalise female points of view, in order to show that—after all—'different' to men does not mean 'less than'. For instance: I implied above that males and females have an unequal investment in status, but that is not quite right. More accurate is to say that male status is more narrowly defined, and pursued at the cost of all else. For me, this part of male nature is both lovable and terrible, producing wonders in its single-mindedness, but inflicting pain on self and others. Germaine Greer—in one of her moments of diamond-bright brilliance—calls it the male 'train-watchiness', their obsession with a very narrow definition of success in whatever field they happen to choose:

> Women are versatile, tough, and contain within their variability all that falls within the range of normal; men are freaks of nature, fragile, fantastic, bizarre. To be male is to be a kind of idiot savant, full of queer obsessions about fetishistic activities and fantasy goals, single-minded in pursuit of arbitrary objectives, doomed to competition and injustice not merely towards females, but towards children, animals and other men.[23]

Greer is not just being poetical: one consequence of sexual dimorphism is greater variance among males than among females, meaning that the difference between the least and most successful males, the best and worst,

20 Helena Cronin,'The battle of the sexes revisited', p. 18.

21 Steven Pinker, *The Blank Slate*, p. 345.

22 Helena Cronin, 'The battle of the sexes revisited', p. 18.

23 Germaine Greer, *The Whole Woman*, Anchor Books, New York, NY, 1999, p. 340.

can be vast.[24] Unlike most second-wave feminists, Greer accepts men and women are different at their core, but focuses on the way we 'culturally exaggerate those differences until they become practically lethal' to women.[25] I'm more optimistic than she, and I'm pretty sure I would ascribe a larger role to biology; but nevertheless, I find hers a useful preliminary model for a feminism that takes biological factors into account. For me, our goal is not 'equality' in the sense of interchangeability, but 'equality of opportunity', a state wherein everyone, regardless of the average properties of their group, is treated as an individual, and can infiltrate male-dominated professions and scale the upper echelons of management free from sexist restraint—or not, as preference dictates. Recently a friend told me she felt bad about the fact she wanted to spend time away from paid employment in order to take care of her child, because she felt this conflicted with her feminist ideals, which was for women and men to partake equally in childcare. In an 'equality of opportunity' framework, each individual could weigh up the myriad costs and benefits of paid versus at-home employment, free from unreasonable restraint on her liberty. This is a form of feminising a masculine world, instead of the reverse: judging women by criteria set by men.

Point of Contact
1980
Ulay/Marina Abramović

But how do we know that male 'train-watchiness' is not because we literally gave them trains to play with as kids—and other mechanical, outcome-orientated toys, while the girls we plied with dolls and tea sets? In an influential 2002 study, Melissa Hines and Gerianne M. Alexander turned to vervet monkeys to address this very question, presenting the monkeys with a selection of toys like dolls and cars, as well as gender-neutral things like picture books. They found that the monkeys 'show sex differences in toy preferences similar to those documented previously in children'—that is, the males spent more time with the cars and so forth, and the females, the dolls. They spent equal time playing with the gender-neutral toys. Of course this doesn't prove anything about vervet monkeys, let alone our own species. But it does suggest that 'sexually differentiated object preferences arose early in human evolution, prior to the emergence of a distinct hominid lineage' and may 'contribute to present day sexually dimorphic toy preferences in children'.[26] The monkeys chose their toys free from peer chastisement, media influence and parental encouragement; but of course, the same cannot be said for humans. As soon as I started looking into all this, I was astonished: study after study, and studies of studies, showing evidence for human sex difference that exists independently from—but is enhanced and complicated by—cultural influences. For instance, cognitive scientist Anne Campbell reports on a study of the impact of sex stereotypes on performance, showing that the well-known gap in the average male and female ability to rotate 3D shapes in space was widened under test conditions in which the participants were reminded that women are not as good as men at rotating 3D shapes in space.[27] Conversely, women are better at remembering landmarks and the positions of objects. Men are better throwers; women can articulate themselves more fluently in speech.

24 Helena Cronin, 'More dumbbells but more Nobels: why men are at the top', *Edge*, https://edge.org/response-detail/10670

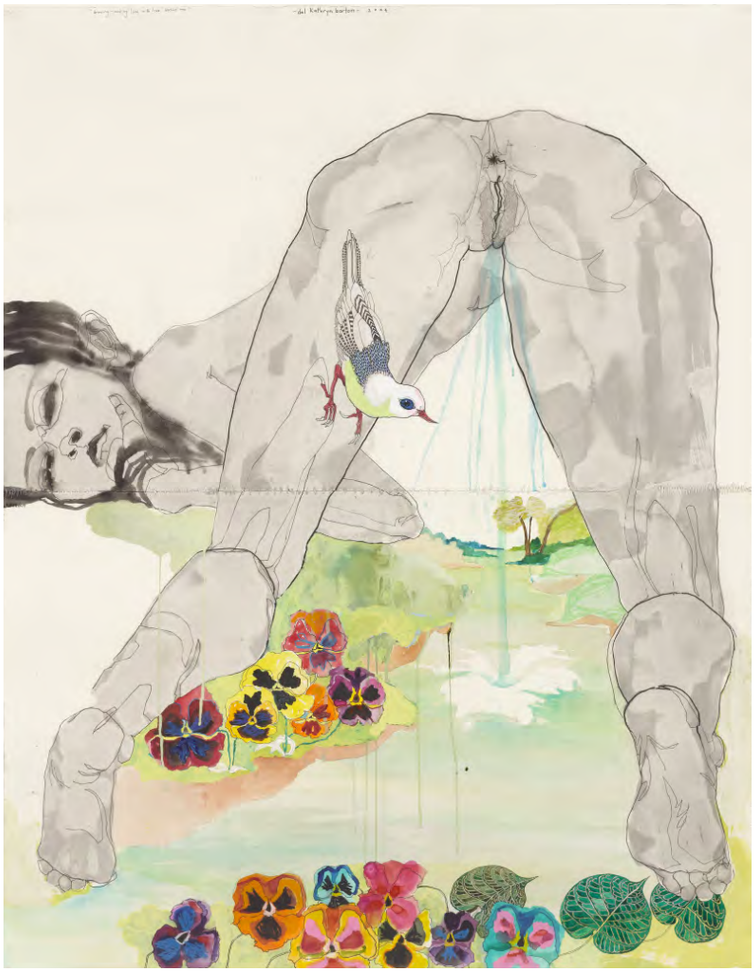
25 Debate with Helena Cronin. In Our Time, 'Feminism', BBC Radio 4, broadcast 7 Jan 1999, http://www.bbc.co.uk/inourtimeprototype/episode/p00545b0

26 Gerriane M. Alexander & Melissa Hines, 'Sex differences in response to children's toys in nonhuman primates (*Cercopithecus aethiops sabaeus*)', *Evolution and Human Behavior*, vol. 23, issue 6, November 2002, pp. 467–79, DOI: http://dx.doi.org/10.1016/S1090-5138(02)00107-1

27 Anne Campbell, 'The study of sex differences: Feminism and biology', *Zeitschrift für Psychologie*, vol. 220, no. 2, 2012, p. 138.

Women are more sensitive to sounds and smells, match shapes faster, read facial expressions more accurately, and have better depth perception and memory for verbal material. They feel emotion (except anger) more intensely, care more about their family and friends, smile and laugh more often, and maintain eye contact more freely.[28] Information like this is crucial to help us form a nuanced picture of the state of gender equality today. Stats on pay gaps are certainly important, too, and—along with other genetic, psychological and cultural factors—can help us work out the best way to fully unleash female potential. This isn't just a social-justice matter; it's for the benefit of all, a human race that has hitherto run at far from full capacity. We need to know where we are headed. For me, that must be towards a world where women everywhere are embraced as fully human, neither sub- nor super-; no more, nor less, human than men.

It is this that I love about the work of Sarah Hrdy, an anthropologist and primatologist who was one of the first, in the 1970s, to 'raise Darwin's consciousness': to show that women are not coy, passive receptacles of male display, but highly strategic operators who engage context-dependent trade-offs in order to maximise reproductive success.[29] Throughout human history women have had to juggle work and childcare; the post-industrial world brings new challenges, with its radical separation of life and work. (Mona would have to be one of the only workplaces in the country where it is not uncommon for meetings to be held at baby-friendly venues. I hope this attitude will soon be more common.) A utopic image of woman as hovering above the grubby demands of a self-serving world is little more empowering than the Victorians' 'angel in the house'. Female primates, human and otherwise, are competitive, Hrdy shows, and they are ambitious. But their strategies and goals are not interchangeable with male ones. This, to me, is the gateway to a truly contemporary feminism, anti-fragile and organic in its recognition of female variability. Hrdy makes her case by building on the knowledge that came before her, finding its weak points and correcting them—not by closing her ears against the parts of that knowledge she does not like, which is exactly what I did when David suggested to me the Geoffrey Miller argument for art. Men and women are biologically the same, I (un)reasoned, because if not, their difference is 'fixed', and I want to change it. There are so many things wrong with this. Different does not mean inferior, for a start. And secondly, biology is far from fixed. Perhaps the most wonderful paradox of our paradoxical condition is our innate plasticity: the fact that we are programmed by natural selection to be free—in the form of super-sensitivity to circumstance, our ability to continually learn and change. Most importantly, the proposition—that men and women are the same—does not accrue merit, does not become more true, according to how much I want it to be true. It is here that we blank-slaters are going gravely



Making Love with Love (version 1)
2004
Del Kathryn Barton

28 Steven Pinker, *The Blank Slate*, p. 345.

29 See Sarah Hrdy, *The Woman That Never Evolved*, rev. edn, Harvard University Press, Cambridge, MA, 1999 (1981) and *Mother Nature*, Ballantine Books, New York, NY, 1999.

30 Jacob Bronowski, *The Ascent of Man*, BBC Books, London, 2011 (1976), pp. 327–28.

wrong, giving way to a pernicious cognitive dissonance: if an idea offends us, reject it as false, based purely on the fact that it offends. For the post-modernists, knowledge is power; and they're right, but not in the way that they intended. For knowledge, in the words of the wonderful Jacob Bronowski, is the 'responsibility for the integrity of what we are'. We cannot maintain that integrity—defend and expand it—if we 'live out of a ragbag of morals that come from past beliefs'.[30] Muddled thinking will only drive us backwards, into absurdity, away from a truly informed, empowered human ethics.

I mentioned before that Miller recently 'raised the consciousness' of his own discipline, advocating a model for evolutionary psychology that focuses on the way men and women compete for each other's attention, as opposed to a model in which men do most of the competing. This is a major, systemic change for his discipline—one that calls for 'a deep rethinking of our world-view, a reprogramming of our research priorities, and a new level of ideological maturity'—and it came about, simply, because new evidence came to light.[31] This kind of critical self-awareness and commitment to generating better explanations—I'm just not used to it, and I love it. It is in this way that I have come to see the falsity of the standard postmodernist line, one that has seeped into popular thinking across the board: that science is 'just another discourse', another narrative about reality, among many. On the contrary, it is the best way humans have come up with to measure reality, to incrementally grow knowledge that is as fail-safe as it possibly can be. Science, unlike religion and some forms of feminism, is driven not to prove itself right, but to find where it is wrong. Scientists are creatures of their times, like us all, and they are susceptible to ideology and ego ('some of us grew lazy' says Miller). But science builds this human frailty into its very structure, prepares itself for it, using a system of checks and balances in which each kernel of truth—which is not really truth, but a hypothesis that has not, so far, been shown to be false—must pass a rigorous standard of testing, and must correspond with other (equally rigorously tested) particles of knowledge that surround it. Think of a crossword puzzle: each word depends, for its veracity, on the coherence of the whole. It is on these grounds we can determine that Judith Butler's 'discourse' on gender is not as valuable as any other. It's a dead end, it takes us nowhere, and can only slow the interplay of human ingenuity, in which each new unit of knowledge 'quickens and enlarges' the rest—multiplying and amplifying in a ceaseless unfolding. This is the best of us, the seat of our ascent. 'Civilisation is not a collection of finished artefacts,' says Bronowski, 'it is the elaboration of processes.' It is this way in which knowledge is not just a measure of our progress but an end point in itself. The result is a painstaking cultural evolution, one that has the power to improve our lot: make us suffer less and be better fed, freer, healthier, in less pain. If 'knowledge is our destiny', it is self-knowledge that might at last bring together 'the experience of the arts and the explanations of science'.[32]

If one aim of science has been to give an exact picture of the material world, one of its achievements has been to show that an exact picture is not possible. And here, finally, I come to something of crossroad between postmodern and scientific accounts of humankind. 'There is no absolute knowledge,' Bronowski explains. 'All information is imperfect. We have to treat it with humility.'[33]

31 Geoffrey F. Miller, 'Mutual mate choice models as the red pill in evolutionary psychology: Long delayed, much needed, ideologically challenging, and hard to swallow', *Psychological Inquiry: An International Journal for the Advancement of Psychological Theory*, vol. 24, 2013, p. 207.

32 Jacob Bronowski, *The Ascent of Man*, pp. 59, 93, 328.

33 Jacob Bronowski, *The Ascent of Man*, pp. 267–68.

Hence that pesky paradox that the more we know, the more we come to see the limits of our knowledge. There's no God's-eye view. The world cannot, after all, be separated from our sense of it; it shifts beneath our gaze, solicits us, must be spoken by us in imperfect words. This is the antidote to what Bronowski calls the 'monstrous certainty' dogma, totalitarianism and terror. Speaking of Auschwitz: 'This is what men do when they aspire to the knowledge of gods',[34] when they do not temper the march of their unchecked ideas with self-awareness, tolerance.

> She need only show separate minds, as alive as her own, struggling with the idea that other minds were equally alive. It wasn't only wickedness and scheming that made people unhappy, it was confusion and misunderstanding; above all, it was the failure to grasp the simple truth that other people are as real as you.[35]

I found this in a novel by Ian McEwan—a story of a girl learning to be a writer. It changed me as much as anything I've read by Dawkins, Hrdy or Pinker.

I'm never going to love science. I don't even want to try. And why should I? The world takes all different sorts of us. It's hard for me to focus for too long on this stuff—this art-as-biology caper—and sometimes, I admit, I want to let it all wash over me, and turn my tired mind to my stories. We don't all need to be the science types; we can just be ourselves. But we will be better selves if we see the limits of our vision, seek better explanations rather than defend what is comfortably known. Make room for difference—which might be, after all, the definition of a good person and a good thinker.

As a student of literature I always wanted to know what 'the point' was: of it all, literature and art, and all the rest of what we do as human beings. I even went so far as to make Ross Chambers' quote the epigraph for my thesis. And although I've become less enamored of his methodology, I still love his bluster and naivety, his sense of humanity (to quote Bronowski) as 'an unending adventure at the edge of uncertainty'.[36]

This essay started as a work of advocacy for the role of biology in human nature. But it is, in the end, a celebration of our capacity for culture. The two are not anathema. They enable each other.

Can an art exhibition—an assemblage of happenings, objects and paintings, on some far-flung, blustery island—change the world? Probably not. Perhaps.

34 Jacob Bronowski, *The Ascent of Man*, pp. 279, 285.

35 Ian McEwan, *Atonement*, Vintage, London, 2001, p. 40.

36 Jacob Bronowski, *The Ascent of Man*, p. 279.