Over the past three decades our ruling elites have been infected with a creeping geneticism. It matters little whether you are speaking of George Osborne or his immediate predecessor as chancellor, Alistair Darling – the odds are that they more or less consciously subscribe to Herbert Spencer’s social Darwinism when it comes to differences between the classes (and, unspoken by anyone at all, between the races and genders), as well as to the genetic determinism of the American popular science writer Steven Pinker.

“Partly by weeding out those of lowest development,” wrote Spencer in 1865, “and partly by subjecting those who remain to the never-ceasing discipline of experience, nature secures the growth of a race who shall both understand the conditions of existence and be able to act up to them…what can be a more extreme absurdity than that of proposing to improve social life by breaking the fundamental law of social life?”

Widely feted in the United States in an era when the gap between richest and poorest was three times wider than it is today, Spencer was frequently cited by the ruling elite to justify the status quo. “The growth of a large business is merely a survival of the fittest,” said John D Rockefeller. “This is not an evil tendency in business. It is merely the working out of a law of nature and a law of God.”

One of the richest ironies of the credit crunch was to discover that the chairman of Northern Rock was none other than Matt Ridley, science journalist and social Darwinist. “Surely not?” I hear you cry, surely not the author of those very readable Just So-type stories about how our psychology was shaped by adaptations made millions of years ago? Yes, that one, the same Ridley who maintains that the survival of the fittest explains us, and that, especially in matters of business and governance, the weak must be allowed to fail, or else the system will suffer in the long term. He it was who stated that “the more we limit the growth of government, the better off we will all be”. I am serious: he wrote that, the chairman of Northern Rock, the very first bank that soon had to be bailed out, in effect, by taxpayers’ money.

But why was a science journalist the bank’s chairman in the first place? Was this the triumph of social Darwinism? As it turned out,
he was chairman because his dad had been chairman for five years before him. It was a family business.

It’s fair to say that social Darwinism did not embed itself so deeply into the thinking of our elites until the Thatcher-Blair, or “Blatcher”, era. It is a fascinating fact, to the best of my knowledge, that The Selfish Gene (written by Ridley’s friend Richard Dawkins) did not become a bestseller until the 1980s, even though it was first published in 1976.

There has long been an assumption on the right that genes explain why the rich are rich and sane, and the poor more likely to be bad, mad and impoverished. Yet the key question for molecular geneticists today is: why are siblings so different from each other, despite having had the same biological parents? Many incline to the cosy answer that “it’s a bit of both”—by which they mean a bit of nature and a bit of nurture. Yet the evidence I presented eight years ago in my book They F*** You Up already showed that, even if you accepted the validity of studies of identical twins (which I did not), on which nearly all claims about the role of genes were based, they still did not support this idea of a bit of both. In fact, for most common traits, such as sociability, memory or creativity, genetic inheritance accounted for only close to a quarter.

Then came the first findings of the Human Genome Project, in 2001. It mapped all the human genes, enabling researchers into molecular genetics to identify how specific constellations might differ between individuals. If, for example, schizophrenics or depressives had different gene patterns, that would explain the disease. To the horror of geneticists, Craig Venter, co-leader of the J Craig Venter Institute, revealed that human beings have about 25,000 genes only. This showed by extension that genes could not fully determine psychological differences between individuals. “Our environments are critical,” Venter concluded.

Initially Venter’s findings were widely disputed, but over the past decade the thousands of studies on which many millions of pounds were spent attempting to identify genes that have much effect on our psychology have failed. The most distinguished researchers now accept that it is extremely unlikely that there are single genes for major mental illnesses such as schizophrenia. (After decades of hearing from these people that there would be “a gene for” almost everything, I admit to having felt a twinge of smugness.) Their fallback position is that what matters is the interaction of many different genes. But that very much remains to be seen, and now comes the first sign that the geneticists may eventually have to admit defeat.

### Social environments – not genes – explain rates of depression

A recent editorial in the authoritative *Journal of Child Psychology and Psychiatry* was entitled: “It’s the environment, stupid!” The author, Edmund Sonuga-Barke, noted that “serious science is now more than ever focused on the power of the environment – all but the most dogged of genetic determinists have revised their view of the primacy of genetic factors”.

According to Sonuga-Barke, in his own field of attention deficit hyperactivity disorder, “even the most comprehensive genome-wide scans available, with thousands of patients using hundreds of thousands of genetic markers, appear to account for a relatively small proportion of disorder expression”. In plain English, genes hardly explain at all why some children have ADHD and not others.

Another fallback is to claim that our genes create vulnerabilities that environments may or may not cause to be expressed. But this position was undermined in June 2009. Studies by Avshalom Caspi in New Zealand had shown that people with a particular gene variant were more likely to become depressed if they were maltreated as children; the variant created a vulnerability. This has been all but disproved. Published in the *Journal of the American Medical Association*, a meta-analysis by a team of ten scientists led by Neil Risch, of 14,250 people in total whose DNA had been mapped across 14 separate studies, showed that those with the variant were not at greater risk of depression than those without it. Nor were they more likely to be depressed in cases where childhood maltreatment combined with the variant.

On a wider plain, evidence is mounting that it is social factors, not genes, which explain why some groups suffer more from depression than others. In developed nations, women and people on low incomes are twice as likely to be depressed as men and the wealthy. Yet when their DNA is tested, neither women nor the poor are found more likely to have the variant. Worldwide, depression is least common in the Far East. Yet a study of 29 nations found the variant to be commonest there (in China, Japan, Korea, Singapore, Taiwan). The degree to which a society was collectivist rather than individualistic partly explained depression rates, not genes, according to Joan Chiao (et al) in *Proceedings of the Royal Society B: Biological Sciences*.

There are convincing reasons, as I wrote in my book *The Selfish Capitalist*, for supposing that free-market (what I call selfish capitalist) economics are a leading cause of high levels of mental illness. Using data from a very reliable 2004 World Health Organisation study (the World Mental Health Consortium), I found that the prevalence of mental illness is twice as great in New Zealand and the US as in six relatively unselfish, capitalist, mainland western European nations (Belgium, France, Germany, Italy, the Netherlands and Spain). If you include other studies for Australia, Canada and the UK, the average level of mental illness for all the English-speaking, selfish capitalist nations is 23 per cent of the general population, against 11.5 per cent for continental European countries. This cannot have anything to do with genes.

It is important, too, to recognise that there are large variations in levels of mental illness over time within different societies. Depending which studies you believe, a 25-year-old American woman was between three and ten times more likely to be depressed than her grandmother would have been in 1980. There is convincing evidence that prevalence of mental illness doubled in the UK between 1979 and the present. Again, genes could not possibly explain such changes.

Clearly genes are the source of fundamentals such as the capacity for humour or anger, and we never needed the mumbo-jumbo of Ridley or Pinker to tell us that. But by how much and how we express these fundamentals is in response to our particular family situation. The huge quantity of evidence showing that childhood nurture is a critical factor in mental illness starts in infancy. If the care during your first year was unresponsive, you are at much greater risk, and likewise as a toddler: you get used to being let down and expecting the worst, right from the start. There are studies now showing that quality of care in your first two years affects the main symptoms of personality disorder (febrile moods, narcissism and so on) 30 years later. Likewise, the quality of care you receive before the age of three predicts how secure you are in your relationships many decades later.

In older childhood, over-controlling mothers who hover over their child’s every action with
Persecution of the geeks
By Michael Barrett

When a lad turned up at my comprehensive school in deepest Essex in the late 1970s and claimed a strong interest in mathematics, he was immediately nicknamed “Pillock” and remorselessly bullied until he moved on. And I remember how later, when I was at Cambridge, within the rarefied junior common room (or bar, as it might otherwise be known), it was possible to find in one corner a group of earnest, bespectacled, young “natskis” (a mildly abusive label for those studying the natural sciences) playing tiddlywinks. In another corner, there would often be the rugby club, usually engaged in unsophisticated drinking games, after which they would invariably steal the tiddlywinkers’ board and wreck their night out.

The general perception was that the rugby boys were cool and the tiddlywinkers were “sad”, antisocial losers. Why does society seek to shun and ridicule science and scientists? What are people afraid of? The modern world – the food we eat, the way we travel, our staple means of entertainment and communication, our health and well-being – is all pretty much the product of scientific endeavour. Science and scientists should be at the heart of society and respected as such. Yet the general perception remains that scientists are weird geeks or dangerous zealots who occupy territory somewhere along the autism spectrum.

The recent attack by the career pontificator Simon Jenkins in the Guardian against science in general and Martin Rees, Astronomer Royal and president of the Royal Society, in particular, was dismal.

Rees is, according to Jenkins, little more than a scurrilous who squeezed a fortune from the last government and is now mounting a campaign to soften the blows on science from George Osborne’s sharpened axe. Jenkins points his grubby finger at the perceived blunders of contemporary science. But, in so doing, he reflects society’s failure to credit science for its successes. He deplores the advice that kept planes on the ground in April and May because of the dust clouds created by the Icelandic volcano, while conveniently ignoring the scientific advances that put planes in the air at all. He mocks the science that banned beef on the bone without mentioning how science identified the “prions” that cause mad cow disease.

Science, he goes on, wasted £2bn on Tamiflu. More importantly, he forgets that science discovered that flu is caused by a virus. Science invented Tamiflu, too.

Why does science allow itself to be caricatured in this way? Is it because scientists fail to articulate the relevance of their work? Or do people fear those who wish to probe the unknown, and so set them, like medieval witches, on the periphery of society?

I read another crude anti-science diatribe, written by James Le Fanu, in the August issue of Prospect magazine. We have found out all we can about the world using the scientific method, he argues. Science can go little further in probing the origins of life or the mystery of consciousness. Like a fool locked in a closed room, Le Fanu contents himself with the belief that he has seen the boundaries of space and time.

The stupidity and complacency of his position are laughable. As we move from the playground and the student union into the real world, so the stakes rise and science-bashers raise their game. Last year, for example, the science writer Simon Singh (see page 21) was sued for libel after querying the scientific foundations of some of the more far-fetched claims of chiropractors. Thankfully, a campaign led by the laudable Sense About Science group supported Singh and the case was eventually dropped.

And in October 2009, David Nutt’s scientifically sound but politically unpopular advice on drugs led to his sacking as a government scientific adviser. Hans Blix, a seasoned career diplomat, may have weathered the storm unleashed on him by the American right following his calm, objective investigation into weapons of mass destruction in Iraq, but David Kelly was less fortunate in this country. The anti-science bullies got him in the end.

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The Labour Party urgently needs to rethink its purpose. Here is a modest proposal: whatever specific policies it develops, these should start from three fundamental considerations, two of which are strongly supported by modern science.

First, create a society in which the maximum opportunity for a mentally healthy, fulfilled life is more important than enriching a tiny minority. For three decades the wealth of the latter has increased, to the emotional and material cost of the rest of us.

Second, we need to place meeting the needs of children, especially small ones, ahead of all other priorities, apart from material basics such as food, medical support and housing. As I have long argued, that means ensuring every family with a child under the age of three has the national average wage, in order to enable one or both parents either to do the caring, or to pay someone else to do it at home.

Third, we need to create socio-economic conditions that maximise mental health. That means creating greater economic equality, much more secure working conditions, much greater employment flexibility for parents of small children and a 35-hour week.

There is not a chance in hell of any of this happening until politicians understand what the science is telling us. But, for what it’s worth, I predict that climate change, rather than this, is what will save us. Somewhere between 20 and 50 years from now, it will be the new orthodoxy that the zero-growth model is the one to applaud, nationally and individually. We will start to realise it is our only hope for survival.

Oliver James’s latest book is “How Not to *** Them Up” (Vermilion, £17.99). Read more by him at selfishcapitalist.com and at: newstatesman.com/writers/oliver_james