The myth of inherited inequality

The science is clear says Danny Dorling: intelligence isn’t inherited. So it’s not just wrong for politicians to talk about potential, it’s bad for equality.

John Hills’s National Equality Panel report of January 2010 revealed that our social divisions are even wider than we thought. In London today, the best-off tenth of citizens have recourse to 273 times more wealth each than do the worst off tenth. Never before has so much been held by so few; and such great inequalities in wealth can dull our thinking by creating a pernicious assumption that people are inherently different.

If most people in affluent nations believed that all human beings were alike – were of the same kind, the same species – then it would be much harder to justify the exclusion of so many people from so many social norms. It is only because the majority of people in many affluent societies have come to be taught that a few are especially able, and others particularly undeserving, that current inequalities can be maintained. It seems inequalities are not being reduced partly because enough people have come – falsely – to understand inequalities to be natural, and a few to even think inequalities are beneficial.

The code word used to talk of inequality as natural is to talk of children having differing ‘potentials’. This belief in inherited intelligence – geneticism – is dangerous and remains uncritically challenged at the heart of much policy making in Britain. But recent evidence can help dispel the myth that children from different social backgrounds are born with differing potential.

It was only in the course of the last century that theories of inherent differences amongst the whole population became widespread. Before then it was largely believed that the gods ordained only the chosen few to be inherently different and therefore favoured – the monarchs and the priests. Back then mass deprivation was a fact of life, as there simply could not be enough produced to enable the vast majority to live anything other than a life of frequent want.

It was only when more widespread inequalities in income and wealth began to grow under nineteenth century industrialisation that theories attempting to justify these new inequalities as natural were widely propagated. Out of
evolutionary theory came the idea that there were a few great families which passed on superior abilities to their offspring and, in contrast, a residuum of inferior but similarly interbreeding humans who were much greater in number. Often these people, the residuum, came to rely on various poor laws for their survival and were labelled paupers. Between these two extremes were the mass of humanity in the newly industrialising countries: people labelled as capable of hard working but incapable of great thinking.

These early geneticist beliefs gave rise to eugenics. Eugenics had become almost a religion by the 1920s; one that famously gripped many prominent Fabians at the time. It was an article of faith to believe that some were more able than others and that those differences were strongly influenced by some form of inherited acumen. However, after the horror of the genocide of the Second World War, where men of all classes fought and died together, and after the later realisation of the importance of generation and environment to achievement, eugenics was shunned. Contemporary work on epigenetics – the study of heritable changes in gene expression that do not involve changes to the DNA sequence – explicitly steers away from saying genetic makeup determines the social destiny of humans along an ability continuum. But, in contrast to modern scientific understanding, geneticism is the current version of the belief that not only do people differ in their inherent abilities, but that our consequent ‘ability’ (and other psychological differences) are to a large part inherited from our parents.

There are sceptics but the overwhelming weight of progressive scientific opinion now suggests that, if there is any inherited influence on acumen, the effects are tiny. Recently I have brought together the evidence and have been convinced: there is no general, even slight, inherited inequality. Sadly, many political commentators are unaware that the debate as to whether inherited acumen is minuscule or non-existent has moved on. For instance even the Guardian newspaper recently published an article which suggested that “common sense tells us that inherited inequality is in part the result of economic injustice and in part the results of disparities of intelligence.”

As Professors of Psychiatry and Psychology at the University of Minnesota (and international authorities on genetics and twin-studies) Irving Gottesman and Daniel Hanson, pointed out five years ago: “questions of nature versus nurture are meaningless.” They explain that depending on the circumstances into which we are born and given how malleable and unformed our brains are at birth, none of us are destined regardless of circumstance to be either great thinkers or great imbeciles.

Intelligence is not like wealth. Wealth is mostly passed on rather than amassed. Wealth is inherited. Intelligence, in contrast, is held in common. James Flynn’s work has shown how successive generations of children appear to out-perform their parents when their apparent intelligence is measured. Unlike monetary
Wealth, what matters most when it comes to appearing to be clever is the generation you are born into, then where and to whom you are born.

The similar outcomes of identical twins are often held up as evidence of genetic influence on IQ. If identical twins are separated at birth and then adopted by different families, they will appear to perform in a way that is correlated. This is, however, unconvincing as proof of inherited intelligence. Firstly, as Flynn explains, they perform similarly because they are of the same generation. Secondly, there is a great deal of evidence to suggest that teachers and other key individuals treat children slightly differently according to their appearance, leading to differential attainment. And of course the one thing we know about identical twins is that they tend to look very much like each other.3

Studies of how Afro-Caribbean children did badly in school in the 1960s when taught by white teachers in London, or of what happens when you suddenly decide in an experiment to treat all the blue-eyed children in a classroom with disrespect, show how much it matters how children are treated when they are learning. The correlations between the measured test performances of identical twins separated at birth are slight; slight enough to easily be explained, not by genes, but by how different sets of teachers are treating them in similar ways because of their similar physical appearance. Tall, good looking, white children receive (on average) more praise in societies where the bias is toward height, certain perceptions of beauty and being white – and get correspondingly better results.

The current scientific consensus is that intelligence – the capacity to acquire and apply knowledge – is not an individual attribute that people come with, but rather it is built through learning. No single individual has the capacity to read more than a miniscule fraction of the books in a modern library, and no single individual has the capacity to acquire and apply much more than a tiny fraction of what we have collectively come to understand. We act and behave as if there are a few great men with encyclopaedic minds able to comprehend the cosmos; we assume that most of us are of lower intelligence and we presume that many humans are of much lower ability than us. In truth the great men are just as fallible as the lower orders; there are no discernible innate differences in people’s capacity to learn, other than those caused by failing to develop basic cognitive functions. Take, for example, Margaret Thatcher’s ‘tall poppies’ speech:

“I would say, let our children grow tall and some taller than others if they have the ability in them to do so. Because we must build a society in which each citizen can develop his full potential, both for his own benefit and for the community as a whole, a society in which originality, skill, energy and thrift are rewarded, in which we encourage rather than restrict the variety and richness of human nature.”
The ‘full potential’ idea presumes some great variety in potential. That variety is not found when looked for – except by those who wish to find it. There is variety in outcome, but not in opportunity, if unhindered. Human intellectual ability is rather like our ability to have opposable thumbs or binocular vision or to sing: we evolved to have it. There are cases where children are born with potential fixed low – but these are the results of just a few conditions, such as oxygen depletion at birth, chromosomes causing Downs Syndrome, malnutrition problems and severe lack of attention. It is much more an either/or, for those unlikely to do like others regardless of subsequent circumstance, than the commonly perceived continuum of intelligence. Our problem today is that 100 years of intelligence testing strengthens the idea of there being a curve of ability potential.

Britons spend proportionately more money than any country other than Chile on private education – more even than the USA, below Higher Education level. Half of all ‘A’ grades at A-level go to the 7 per cent of children privately educated. It’s very sad for the English – but a great natural experiment for the world to show that you can simply take a set of children and throw money at them and they will appear to do well at tests. That does not mean there is a continuum and these children are near the top end of it – what it does mean is that you could take 7 per cent of almost any set of children and put them in an environment that means they appear to learn more than the other 93 per cent. If there were a continuum to ability potential then the private schools – and especially the top public schools – would have found it far harder than they did to monopolise the A grades.

Learning for all is far from easy, which is why some educators confuse a high correlation between test results of parents and their offspring with evidence of inherited biological limits. Human beings cannot be divided into groups with similar inherent abilities and motivations; there is no biological distinction between those destined to be paupers and those set to rule them.

In academia today, perhaps unsurprisingly, those whose arguments more often suggest possible hereditability are disproportionately found in the most elite institutions, and among many of those who advise some of the most powerful governments of the world. Eugenicism has risen again, but now goes by a different name and appears in a new form and is now hiding behind a vastly more complex biological cloak. For example, it was recently stated in a textbook book supposed to be concerned with ‘fairness’ and including amongst its editors people near the very heart of government, that “there is a significant correlation between the measured intelligence of parents and their children ... Equality of opportunity does not aim to defeat biology, but to ensure equal chances for those with similar ability and motivation.” This quote was written by a professor based in the city of Oxford. It is disproportionately from places such as Oxford University that possible excuses for exclusion are more often preached. To give another example from the same institution: “children of different class backgrounds tend to do better or worse in school – on account, one may
suppose, of a complex interplay of socio-cultural and genetic factors.”5 Outside of Oxford, researchers are so much more careful with their words when it comes to suggesting such things. Why?

There are many advantages – but also disadvantages – to working in a place like the University of Oxford when it comes to studying human societies. It is there and in similar places – like Harvard and Heidelberg – that misconceptions about the nature of society and of other humans can so easily form. This is due, Pierre Bourdieu has claimed, to the staggering and strange social, geographical and economic separation of the supposed crème de la crème of society into such enclaves.6 The British Prime Minister during the time these Oxford academics were writing had clearly come to believe in a kind geneticism, as revealed in his speeches. Tony Blair disguised his geneticist beliefs by talking of them as the “God-given potential” of children, but it is clear from both the policies he promoted, his ‘scientific Christianity’, and the way he talked about what he thought of his own children’s special potential, that his God dealt out potential through genes.7

A strand of eugenics thinking has never gone away in how many left-wing policy-makers in Britain treat and describe inequality and the poor. We need to exorcise these past ghosts before we can get out of some of the ruts in our current collective thinking. We need to understand that the modern forms of crypto-eugenic belief – geneticism – lead to an implicit acceptance of social segregation, to enclaves, escapism, excuses for huge wealth gaps and an argument being made which promotes inequality as good.


For one of the most insightful discussions, which does not discount the genetic possibilities, but which says they are so tiny that by implicit implication appearance could be as important, see the open access copy of James Flynn’s December 2006 lecture at Trinity College Cambridge: [http://www.psychometrics.sps.cam.ac.uk/page/109/beyond-the-flynn-effect.htm](http://www.psychometrics.sps.cam.ac.uk/page/109/beyond-the-flynn-effect.htm) (accessed 9/7/2009), the full length version of the argument is: Flynn, J. R. (2007). *What is Intelligence? Beyond the Flynn effect*. Cambridge, Cambridge University Press.


