Could Enough Willpower Ever be Mustered to Renew Education?

by <u>Christopher Ormell</u> (August 2023)



Woman Reading, Camille Corot, 1869

In recent essays in New English Review, I explored and discussed the dire state of mass education in most advanced countries around the world. It has, in effect, disoriented the

human race, because it has thrown all its emphasis onto getting children to *learn* things, but neglected to ensure that they *understand* them too. (Thank goodness there are a few private schools, who do take the trouble to check that their pupils have understood.) The problem can be traced to the behaviourists who took over most "education" systems around the world in the late 20th century. (The blunder of new math for schools in the 1960s had opened the door for the idiocy of progressivism in schools. On principle, progressivism let the children decide what they thought they wanted to know. But they hadn't actually the faintest idea what they needed to know. Letting them flounder was a cruel con.)

So these behaviourists, whose bible was *Bloom's Taxonomy*, were initially welcomed with open arms. Unfortunately the original edition of *Bloom's Taxonomy* also contained a serious mistake. It rubbished the word "understanding." In other words it trashed the central point of education. The result could have been predicted: if you don't systematically make sure children understand what they have learnt, the cumulative result after forty years is going to be a lot of disorientation.

[Incidentally, the latest edition of *Bloom's Taxonomy* says that understanding is the end result of a lot of rote learning. This shows very plainly that the Bloomians don't understand how the human mind works.]

"Understanding" means having a joined-up picture of the world, and it is becoming more and more essential for us all, because today's world is inter-connected and inter-dependent like never before. So the Bloomians who have disoriented the human race, have done their damage at a particularly dangerous time.

We very urgently need a new paradigm in education and its main object should be to get every child to *understand* the world around her or him—in the simplest possible way. Also how it came about, where their cultural tradition came from, and how it can be sustained in a world which must be able to take everyone's personal reliability for granted. This means that personal accountability and understanding must be the new motifs of education.

But at the end of the day the main difficulty facing a renewal campaign for education probably lies in getting any kind of *action*, getting enough people to care sufficiently to *do something* about this extremely unsatisfactory situation. Let's face it: there is a mountain to climb ... because it involves getting a potent democratic pressure group together to initiate, support and drive a massively ambitious project: one moreover offering a relatively distant, rather hazy, rather cerebral, goal. A blanket of mass disorientation and hopelessness stands squarely in the way. Many depressive responsible people seem to have *convinced themselves* that anything like this is a lost cause. Apparently immovable obstacles are thus blocking the way ahead.

These obstacles can be-hopefully-in principle, overcome, but it will take a great deal of hard thinking, concerted public effort, commitment and persuasion, to move these roadblocks out of the way.

Many people conclude fatalistically that "nothing can be done," because "what needs to be done" is almost unimaginably extensive. They perceive that we are under a dark post-modern cloud, and that the light is getting dimmer by the day. For many, the mere possibility of hopefulness sounds unreal … i.e. much too good to have any hope of being true.

Probably only exciting fresh thinking can break this mould. This is why I have put so much emphasis in my earlier essays on anti-mathematics. The arrival of this new, wholly unexpected, astonishing, abstract discipline, is a culture shock (to the mathematicians) of *ten plus* on the Richter Scale. In effect, it banishes the historic mystique surrounding math, because that long-standing "mystique" rested on the premise that "math is the highest form of human knowledge." Everyone agreed for centuries that "there is no alternative to math." Very few indeed saw the slightest sign that anti-mathematics was on its way ... because they and everyone else had been brainwashed into the belief that the math monopoly was iron-clad and invincible. The gurus of math themselves were *absolutely sure* that nothing could ever challenge math as the "supreme, privileged, Godlike form of human knowledge." Now, suddenly, it has been ... in principle. (Of course mass recognition of this insight will take time to sink in.)

It is equally shocking that math's likely fate is to end-up second best: because everyone can see that transience is near the heart of the human condition, and-even more demoralizingly-that no one can ever know whether "timeless reality" really exists (that is, in the real world as well as in the imagination of the gurus of higher math).

In compensation, some mathematicians will be pleased that anti-math will require masses of supplementary ordinary math (as a meta-language) if its full promise is to be achieved.

Some people simply dismiss anti-mathematics as chimera. I'm afraid they are clutching at straws. It can no more be *un*discovered than the binomial theorem. The furniture (the 'stable objects'), the three dimensionality of space, the limit on the speed of objects relative to other objects, and the method of building new objects, especially anti-math scientific models, were summarised in my essay in the June 2022 issue of *NER*.

So here is our cue to learn to think *hopefully* again. It offers for the first time an outline explanation of why a physical universe exists at all. (The universe consists of the necessary physical by-products of the unique laws needed to create sentient, conscious beings with creativity and freewill.) Who knows what amazing explanations are out there waiting to zoom into view as a result of future anti-math modelling?

This is not idle speculation. Anti-math is a discipline as distinct and demanding as math. It can be the basis of scientific research programs every bit as professional as math-based research programs. (It differs from math, though, in that its models are qualitative and synoptic rather than quantitative and precise.)

For more than a century physics has been associated in the popular press as a source of some exciting, and some dangerous, new technologies. But this is only part of the story. Less widely known is the frustrating explanatory quagmire in which it has long been stuck. Probably this came about because it was trying to use a mixture of traditional and compromised, semi-modern concepts. Now the awful truth has been revealed—that most of the matter in the universe is "dark matter." and much of the energy is "dark energy" —both things about which we know almost nothing. Physics is in a situation where it has got to pick itself up and start again.

We need to get used to the new theoretical landscape: that there are now two polar-opposite abstract modelling kits, math and anti-math. The former has been around for more than 2,000 years while the latter is in its earliest infancy. A new chapter of our understanding of the world around is just beginning.

Learning to think hopefully again, though, comes with a cost: it means that we have got to unlearn some of what we were told "was unquestionably true." Now we know it wasn't.

But this is not a simple switch. Some of what we were told was "unquestionably true" was unquestionably true. The outline values of math are its generation of precision, rigid rules, structure and regimentation. They sound, and are, forbidding. Actually they are needed to a degree, because we rely on math to deliver our electricity, our water, our airplane flights, our broadband signals, the purity of our drugs, our food and drinks, etc. But although precision, rigid rules, structure and regimentation are needed in moderation, they become oppressive when they are overdone. (They were probably mainly to blame for the brutality of the Roman Empire and the slave trade of the 18th century.)

And the overdoing which has been most overdone is surprisingly close to home—the notion that the human mind is "fundamentally mathematic."

Of course it isn't.

Descartes' dualistic metaphysics may have been a throw-back to medieval-think, but he was not wrong in his basic perception that mathematics applied (to a considerable degree) to the outer world, and didn't apply to the inner.

Left to its own devices, the human mind could hardly be less "mathematic." We don't think, feel or imagine by precise rigid rules, formal structures or regimented memes. We all know this. We know the effort it takes sometimes to get up in the morning. In the 18th century David Hume eloquently explored just how short-sighted, crass, emotive and irrational the human mind can be. It is only some gurus—who have swallowed the notion that science is necessarily mathematic—who have tried to brainwash us into thinking that the human mind "must be" describable by mathematics, i.e. that it must work by means of (supposed) in-built mathematic laws.

They are wrong-hopelessly wrong-because they have overlooked the role of anti-mathematics. They are, in addition, dangerously self-deluded. They seem to think that state-ofthe-art AI is "intelligent" (mainly because they were responsible for thinking-up this dashing PR phrase 'artificial intelligence' while incidentally forgetting that they didn't actually know what genuine intelligence was). Recently a TV programme I was watching with subtitles (generated by AI) interpreted the spoken word 'tsunami' as 'soon army'! I don't think anyone with an ear for meaning would agree that this was a sign of "intelligence." A person who interprets the word "tsunami" as a kind of "army" is an ignoramus. And it goes without saying that they are very, very far away from being "intelligent." Even thinking that "soon army" is grammatically correct, itself signals a total absence of intelligence.

AI apparatchiks will no doubt retort that the neural network used by this particular AI had not been taught the word "tsunami." So it was a *human being behind the AI* who was to take the blame for not being genuinely intelligent after all. (He or she must have forgotten that the 2004 tsunami killed around 230,000 people.) A serious lack of intelligence and with-itness, on the part of those who set up the chatbots and coined the term "AI," is evidently coming home to roost.

Neural networks are, of course, a good idea for getting computers to search widely, obscurely, furiously and indiscriminately for stable patterns. This is what they do well ... in medical diagnoses, searching for drugs, forensics, etc. But it doesn't make them "intelligent." It just makes them good at spotting patterns.

Intelligence in the genuine sense covers much more than this—at its centre is an acute perception of the relevance of a particular pattern "out there" to current human concerns. This 'relevance' resides in feelings, not in math formulae.

The notion that human knowledge has been accumulated by means of much pattern-gathering and pattern-spotting is laughably off the plot. For one thing, there are all sorts of patterns which can be "spotted out there," but which don't mean a thing (e.g. patterns in clouds). This is something we teach at an early stage to students of statistics. Correlations can be meaningless. They certainly don't establish causality … which incidentally was David Hume's principal thesis in his famous *Treatise*. But the computer sector has bewitched most of the human race with its magical machines for more than sixty years, and the sector's PR departments have been getting away with a great deal of hype for the same length of time. Against the background of this pervasive exaggeration, trying to get good sense into the discussion of these matters is almost impossible.

To create the conditions for a root-and-branch reform of "education" we need light at the end of the tunnel. But, in spite of sixty years of computer hyping, that "light" is clearly *not* so-called "Artificial Intelligence." Some AI experts are foolishly predicting *doom* at the end of the tunnel ... an intimation of doom which will, thankfully, evaporate once mainstream opinion realises the extent to which we have been misled.

So without some sense that there is light at the end of the tunnel, it is probably impossible to encourage the average citizen to take any interest whatever in educational renewal. Probably a majority of ordinary people are unaware that current endemic disillusion and despair is an indirect product of a suppressed hopelessness which has quietly set-in among the elites of IT, higher math and science ...

Those who have fallen prey to this hopelessness are popularly known as electronic pioneers—who have led the way, and driven society into its present jaded, nervy, ultra-modern condition. Many of these pioneers, though, are now depressed to the *n*th degree. Their former brimming confidence has vanished. Many of them are terrified that we are all "eventually" going to be annihilated by robots.

This only makes sense if you believe that the human mind is intrinsically mathematic. These "pioneers of IT" were evidently never led to see during their school years what David Hume perceived clearly more than two centuries ago. So where has the 'severe hopelessness' behind all this despair come from?

The quick answer is that the hoary paradigms on which the three elites are still relying, are failing them. Members of the elites tend to suppose that they have brought their subjects up to date, and hence that they are 'in tune' with the modern condition. They could hardly be more mistaken. The worst culprit is the higher math elite, which seems to think that its subject is unquestionably timeless, and therefore that no fundamental change of perspective is needed. They have forgotten that higher math is a human activity, and if young people cease wanting to participate in this activity, it will eventually disappear.

The educational crisis won't easily go away. The sheer amount of disorientation is visibly sapping commonsense, clear thinking and rigour out of the human condition. Left to take its own course, it will lead us to mental extinction.

So we need to wake up to the seriousness of the situation. There is still time to save the human race. The therapy we need is genuine education. And the way to get this therapy into place, is to focus on an unexpectedly bright, promising light, which is beginning to glow at the end of the tunnel.

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