Can We Get Back to Mental Balance?

by Christopher Ormell (March 2024)

Woman Teaching Geometry, from a medieval illuminated manuscript of Euclid's Elements, c. 1310

We are living in turbulent times and it is almost impossible to imagine that today's children—when they reach retiring age—will look back and declare in public that the 2020s were the 'Good Old Days.' Probably they will be able to inform their grandchildren instead that the 2020s were, rather, the '*Very Bad* Old Days!'

Hopefully, humankind will, by then, have found the mental wherewithal (a widely shared self-knowledge) to be able to live on a stable, even mental keel. Today there are ghastly parts of the globe such as Gaza, Donbas, Sudan and wildfire forests in California, Australia, Spain, etc. which seem alarmingly like snapshots of the end of the world. So a 24 hours may sometimes count as a 'Very Bad Old Day,' and the worst thing about it is … that it is not 'old' at all, but happening now.

And, a further irony of ironies, this is a time when we have the most wonderful technical gismos imaginable. They are gadgets which would astonish any thoughtful person who was at their prime, say, in 1930. How did today's world fall into such an unholy mess … *just at the time* when it was awash with miraculous technology?

The gismos tell us something important—that all is not lost. To paraphrase a former President, "There is nothing wrong with civilisation, which can't be fixed using what is right with civilisation." Today's marvellous computer power is awesome, and commonsense tells us that it should be just what is needed to re-establish balance. Somehow today's dreadful IT aberrations—which hand evil power to the elbows of liars, fakers and scammers—need to be removed.

Democratic law needs to come down like a ton of bricks onto anyone who uses IT to add to the—already dangerous—level of

general and targeted mental confusion.

There are two main places where balance is missing: (i) the power of the individual vis-a-vis that of the community, and (ii) the power of an individual-and-or-a-community vis-a-vis the natural world. Both are in a bad state of disarray. Under (i) there are many cases where a few activists are holding large groups and communities to ransom. Under (ii) the most visible offenders are countries which are pumping billions of tons of carbon-di-oxide into the atmosphere. Such imbalances—and many others—seem to have crept in, aided no doubt by the adrenaline of the market, a long decline of religious belief, forgotten moral code, and unedifying education. Trying to restore these crucial balances can only be a thankless task. But if we don't, chaos and catastrophe will surely follow.

Can we pin down what went wrong? Can we find the resolve necessary to re-install general personal balance? Raising consciousness about accountability is, of course, the obvious way. But though much lip service is paid, it is almost everywhere in short supply. To grow it to the minimal sustainable level, accountability will have to be talked-up and talked-up again—valorized in no uncertain manner. It needs to become the central, the dominant, civic value. Unlimited time isn't on our side, but some time will be needed to re-establish balance, to sort out what is right and what is wrong.

And incidentally, we need to wean ourselves off the seductive modern notion that everything, everywhere needs to be done quickly. *The quicker the better*, today's implicit motif, could hardly be more foolish. It signals a degree of impatience, which no sensible society should contemplate, foster or flaunt. (It's obviously the quickest way to propagate error.) Quick thinking is what dubious characters do when they're challenged by the law. Slower, calm, reflective thinking is the only sort which may work well: the only sort likely to be

able to throw light onto how we can return to an even keel. Alisdair MacIntyre famously drew our attention (1981) to a vacuum of common virtue. Jonathan Rée, in a recent article in the *London Review of Books* (Jan 2024), praises MacIntyre for his personal example—namely that he has taken so much time to reach his final, measured (religious) conclusion.

Unfortunately, however, it is not quite as simple as MacIntyre's conclusion suggests. Religion took a body blow in the quarter-century between 1945 and 1970—when the four scientific whammies (the arrival of atomic energy, computer power, space travel and DNA) arrived. They were hard-to-believe, civilisation-changing, biblical-type events … nowhere mentioned in the Bible.

A heavier body blow has followed. It is that monotheistic religion's greatest former appeal—that it embodies the only possible credible explanation of the universe, i.e. creation by a supermind—has lost its credibility. It has gone AWOL. During the last seventy years many of us have been puzzling over the function of the daunting neuro-activity of the human brain. We have also seen, plainly and unquestionably, just how much unexpected recognition-power electronic logic-circuits can generate.

Both are slowly maturing realisations … which come together and combine to set a strong conclusion: that our minds must surely be the result of (the performance of) the immense neuro-complexity of our biological brains.

This pivotal conclusion bears down heavily on religion: because there is *no sign whatever* of an astronomic super-brain *out there in the distant cosmos.* The probability of finding an immense material superbrain of the calibre needed to underpin a universal supermind … is nil. There's nothing remotely like this lurking among the vast multitude of novas, quasars, black-holes, galaxies and plasmas in outer space.

Modern computers are a bit like brains. They are also a lot *unlike* brains. Why unlike? Because we know from our own direct experience that we enjoy, and they sustain, free-will, imagination, empathy, feelings, emotions, values—in a phrase, that they support a lively, ever-changing, vivid, *consciousness* … something which is miles away from what wired sets of soldered transformers, batteries, microchips, etc. can ever do.

Some earlier pundits, like Pierre Laplace, Sir James Jeans, Albert Einstein … claimed imperiously that "God must be a mathematician." But they were whistling in the dark (not to say indulging in self-serving status signalling). There is no room anywhere—in the structures timeless mathematics can, or might, generate—for the 'lively, ever-changing, vivid consciousness' we all enjoy. And because brains are part of the physical universe—at least on one unlikely planet—it follows that the universe, too, can't be mathematisable as a whole (lots of inorganic aspects of it can, of course, be portrayed—up to a certain "not-yet-falsified level" —using mathematical models).

These are strong, secure conclusions. They arise from seventy years of reflection and experience on the part of thousands of honest, disciplined professionals in cosmology, cybernetics and physiology.

So it is a hard saying, but also a pretty obvious one, that religion cannot explain the universe. Nor can mathematics explain the universe. Unfortunately these conclusions are for many earnest people, quite unpalatable, quite dismissible. They do signal though, I suggest, the confluence of unavoidable, epistemologic facts.

They are also, inevitably, hugely relevant to today's dangerous global crises.

Alas. We are not facing-up to them. We are ignoring them. Most

people are quite unaware of these dilemmas. Opinion leaders avoid them. In effect, the human race is in denial. Too many heads are in the sand.

We are taking a big risk, not facing-up to these dangerous dilemmas. It is like playing blind man's bluff in a minefield.

So what can be done?

The constructive, hopeful way is to ask: How we can understand the universe now mathematics has let us down?

We need an alternative way of doing science: of building explanatory models of real objects, real processes, real phenomena, the mystery of life, the slow drift of evolution, the magic of consciousness. Fortunately a way has been been found: it is the new abstract discipline, anti-mathematics, which is constructable using the same principles as math—by fielding precise definitions and adopting determined reifications of the stable active configurations which result. The only difference is that the new discipline—anti-mathematics—works on, and with, an immense substratum of energised chaos, jumping-random sequences of tally types. These are its ultimate energised building blocks. (It also uses quite a lot of math, incidentally, as the metalanguage.)

So anti-mathematics is the previously overlooked logical study of meaningful, reliable *active* structure of a transient kind—much as mathematics is the logical study of structures of a *static* (or 100% predictable) timeless kind. (Some scepticism about math is in order here. Can we really swallow the 'reality' of the kind of timelessness which has been valorized so much by the 'higher' mathematicians?)

These jumping tally building blocks are also at the extreme edge of scientific knowledge: because modern science has deconstructed the physical world into a series of levels of tinier and tinier invisible entities (minute objects). How could this scheme of levels reach its end? Only by postulating

a final level of ultra-minute shadow-like effects without further interiors: in other words, shadowy effects which lack the slightest hint of either inner ‘structure’ or outward ‘lawlike behaviour.’

(Today’s scientifically recognised tiniest objects are quarks, but these minute objects still have rule-governed behaviours, so they can’t be the final constituents of the universe. Probably several new (as yet undiscovered) levels will be needed to explain the behaviour of quarks.)

The unrecognised actual final level of explanatory objects would have to explain the behaviour of the (also unrecognised) objects on the penultimate level. But since the final level cannot—by definition—exhibit even the slightest behaviour pattern, its objects can’t, unaided, explain the behaviour patterns which obtain on the level above. The only way in which this could happen is if the weak patterns of behaviour on the penultimate level are *somehow imposed* from above onto the shadowy chaos of the final level. And the only mind “above” —capable of providing this vital imposition—is the human mind.

This is, I suggest, another unobvious, quite necessary, quite unavoidable conclusion. It implies that *the human mind* is intimately involved in the existence of the real, physical world. We know of course that the definitions which reify anti-mathematical explanatory objects (in academic studies) can only be enforced by human willpower. But if anti-mathematic modelling is the only kind which has any chance of explaining the biosphere—life, freewill and consciousness—it means that the willpower generated by mind is ultimately subliminally responsible for there *being* a physical universe. So now an amazing concept is beginning to emerge—of a physical universe, ultimately imposed by unconscious willpower, applied ultimately onto a substratum of wholly chaotic shadows. And the unconscious willpower which does this is, of course, itself, part of (a very sophisticated brain-product of) that

physical universe. It means that the universe contains minds which are, in effect, defining themselves and other human beings, while also, collaterally, defining a vast system of unreachable distant astronomic bodies. It also means that our minds are not quite as intrinsically rational and perfect as former idealist philosophers tended to believe.

This is a summary of 'Total Epistemology,' the upshot of a determined inquiry based on the principle that the universe is explainable. The explanations of the future will consist of anti-mathematic models based on jumping random tallies which, by definition, give slightly different outcomes every time they are run. In effect these outcomes are *qualitative* surveys, not rigid, cut-and-dried conclusions. (This echos Heisenberg's Uncertainty Principle. He said in effect that we will never know anything at the atomic level beyond a rough level of approximation.)

We are at a crunchpoint in history. Civilisation used to exhibit a primitive (feudal) kind of stability, based on strict, generally accepted, moral and social code. (These codes also locked-in, we know, much gross archaic injustice.) The codes were based on ancient religion, tribal practice and heredity—the former fortified by notions borrowed from math, like certainty, right v. wrong and 'eternity.'

This earlier, stable phase of civilisation seems to have come to an end. Today civilisation is visibly caving, visibly spinning dangerously out of control … because there has been a grievous loss of inter-personal trust, the kind of trust which is based on strict accountability and secure credibility.

Total Epistemology is quite revolutionary by the standards of traditional mathematic science, because, like religion, it projects a world defined and energised in the last analysis by *mind*. (Such a world—by the way—is much more pleasant to inhabit than today's official alien, hostile, cold, objective, dangerous, potential wasteland.)

A mind-powered world of the new total-epistemologic kind can form the basis of self-evident (neo-Kantian) moral code. It can even offer "gods" of a kind. Because when human knowledge has reached the stage where it has unmasked a lucid, valid, self-evident explanation of consciousness, those who understand the detailed reasoning will be, in effect, flesh-and-blood "Godlike" gurus. They will appear to be omniscient. The late John D. Barrow saw clearly in his book *The Universe that Discovered Itself* that homo sapiens' control over the physical world has increased exponentially during the last millennium. By extrapolating this into the future, he conceived a distant ultimate ('alpha') state of humanity *vis-à-vis* the world, when human beings would be, literally, "masters of the universe." By this reasoning he reached a conclusion about the significance of human power in relation to the universe—one quite similar to that which stems from Total Epistemology.

The downside is that Godlike gurus of this kind can only be expected to materialise in the (very distant) future. As such, the thought of their possible ultimate emergence plainly does not come with anything like the deeply comforting feelings of immediacy associated with religion. (They may eventually judge us from a position of omniscience, but that showdown is a long, long way away.) Psychologists have been saying for years that the Gods of religion are like idealised Father Figures. This insight also applies to the pre-monotheistic past. The earliest forms of religion were, we can now see, focused onto local Gods and Goddesses who probably emerged from just that—half-remembered idealised images of late, celebrated, much respected, tribal leaders.

It is a truism that we are all relatively "on our own." We are born alone and we die alone. We are, quite often, cut off by walls of casual incomprehension from serious moral support from those around us. This is the common human condition. As a result of this awkward effect, the most intelligent people

seem to have acquired an insatiable desire for (conceptualised) personal emotional support—from a postulated monotheistic Christian God, and, more generally (in the case of agnostics), from figures of the past, like dear parents, friends, former leaders, former heroes. One aspect of Total Epistemology which offers a smidgeon of this kind of support lies in its strong emphasis onto the *nowness* of time. (This follows from its qualified view of the objectivity of time, which was formerly treated as an objective mathematic absolute.) This change can enable us to engage in special Rememberances of Moments Past—deliberately re-experiencing them, indeed, as if they were happening now. Everything significant happens in a Now. And the Nows of the past can be, in principle, re-enacted as vividly as those of yesterday. So Total Epistemology offers a larger window than before … to re-inhabit some remembered moments of empathy and togetherness with late parents, friends, grandparents, wider family, past leaders, past heroes.

The most stable mental periods of the past probably occurred when science and religion were not embattled—as they are today—in bitter conflict. During those times science was regarded as *exploring the marvels of God's creation*. We can now experience something like this satisfying unity. Today Total Epistemology is emerging as *the* credible way to deconstruct both mathematics and religion. Wittgenstein began this line of reasoning by vividly showing the relative naivety of the mechanisms which underlie the meaning of ordinary language. As a result, we can now see that the objects of mathematics are not—as previously assumed—mysterious metaphysical substances, but rather common-or-garden reifications like degrees, marriages, debts, treaties … etc. (A good name for such reifications created by social willpower is 'honorific existents.') Linguistic analysis leads us to see this capacity of ordinary language to establish honorific existents—as a natural way of underlining the social priority and status of certain important consensi. This is the "use" of

reificatory language. Using reificatory language projects gravitas onto honorific existents. Some people are apt to say that, although they lack a marriage certificate, it is, after all, “only a piece of paper!” But this ‘only’ only makes sense for those who lack sensitivity to the force of consensus social signalling.

Kant observed that the only goodness we ever directly experience during our lives comes from our inter-actions with others of goodwill. This can now become the basis of a putative analysis of the word ‘God’ … as a way to explain the intense historic meaning of the word. Like the reifications which explain the objects of mathematics (via the determination of mathematicians to stick doggedly to their rules), ‘God’ can be re-interpreted as a reification of the totality of all past, present and future individuals of goodwill. (There is no doubt that this totality sometimes has an unexpected influence on human outcomes. It is an immensely awesome, unpredictable totality, with which most of us prefer to be onside—and of which we can never know more than a tiny bit.) This, then, offers a modern way fully to respect the hazy epistemological/theological intimations of the most spirited, insightful people of the past. Total Epistemology is the unexpected way forward. It points to an essentially personalised, human view of the universe, a secure basis for moral code, and a basis for mental balance too: because it unites science and moral sensibility in a common conceptual framework.

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Christopher Ormell is an older philosopher who shook hands with Alan Turing when he was an undergraduate in 1952. He discovered dynamic contradictions in 1959, an extension of

Peirce’s interpretation of math (to math modelling) in 1964, and a mirror-image of Descartes’ Cogito in 1992. He has also spent a lifetime consolidating his grand youthful idea of anti-mathematics.

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