

Dissolution

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Recently, Ambassador Ryan Crocker was asked to predict the outcome of the US project in Iraq. His wise reply was: *"the thing for which the War will be remembered has not happened yet"*.

A similar prognosticatory modesty is shown by Martin Rees, Lord Rees of Ludlow. He is the Astronomer Royal, President of the Royal Society, and Master of Trinity College, Cambridge.

He writes¹: *"There is [an] open frontier [of science]: the study of things that are very complicated. We may understand an individual atom, and even the mysteries of the quarks and other particles that lurk within its nucleus, but we are still perplexed by the intricate ways atoms combine to make all the elaborate structures in our environment, especially those that are alive ...Science is still beginning: each advance brings into focus a new set of questions...Our everyday world poses a...greater challenge to twenty-first century science than either the cosmos, or the world of sub-nuclear particles ...The big surprises will be the answers to questions that we are not yet smart enough to ask...The question [of] the transition from the nonliving to the living is fundamental unfinished business for science"*.

To this day, nobody actually knows what consciousness is: Is it part of a cosmic consciousness? Does it consist in neurological phenomena about to succumb to materialist physical enquiry? Is it an attribute of Darwinian evolution and selection, ultimately explicable by biologists? Where does it lie, between mind and matter, in the spectrum of cartesian dualism? Nobody knows. So philosophers dub it "the hard problem". Many physicists tended to ignore it, even as quantum theory elevated the conscious observer to the role of sacral participant in their conjectures.

I collided with these questions in Geneva, years ago, when I was at the United Nations - in those days confidently resolving the world's most intractable economic, political and social woes. I recall one Saturday being unsuccessfully taught to ski, a problem with which, to this day, for reasons that will be clear, I yet grapple in vain.

I was in the Savoy Alps, being taught by three ski-proficient German friends. The first, a United Nations colleague, was Wolfgang von Richthofen – large Prussian nephew of the famous First War air ace. Each time I fell, among cascading waves of effortless 3-year old skiers, he would, with the gusto of his kin, order me to "STAND UP". Clearly this was impossible, since the snow was deep, and the obligatory shaped planks were rigidly fastened to my feet.

After about ten repeats of this, our other two friends would arrive, and one would be left behind to escort me a few more feet down the slope, while the other two completed a full circuit back again. The second friend, Guido Peruzzo, comes, like George III's ill-fated daughter in law, from

Brunswick. Guido is an exuberant and amiable companion. Currently, he is Ambassador and Permanent Representative of Germany at the European Union in Brussels. Like the consummate diplomat he was to become, Guido helped and guided me, with balanced challenge and encouragement, over far longer distances than Wolfgang managed.

But I mainly recall these youthful fiascos because of my third instructor that day, Conrad Guettler, now Fellow of Wolfson College at Cambridge University, but at that time a nuclear physicist at the European Center for Nuclear Research at Geneva, known by its French acronym CERN, and site now of the new Large Hadron Collider, which went into action last week.

At the time I visited CERN as Conrad's guest, he introduced me to the particle collider then in operation. Just like its recent new, and bigger, successor, two beams of particles travel close to the speed of light, with very high energy, before colliding with one another. The impact, which I observed on a screen, taking place, as best I recall, in a chamber of mercury, is recorded and measured, and conveys cutting edge information about the behavior of sub-atomic particles. I took away three new, and startling, thoughts from my visit.

The first was the counter-intuitive fact that what happened to the particles at the future point of impact, somehow influenced the past behavior of other particles, in a way that I did not, and do not, comprehend. I was in good company. As D.H. Lawrence poetically put it²:

*"I like relativity and quantum theories
because I don't understand them
and they make me feel as if space shifted
about like a swan
that can't settle,
refusing to sit still and be measured;
and as if the atom were an impulsive thing
always changing its mind."*

My second impression, not at all what I then expected of nuclear scientists, was of the questing humility of Conrad and his colleagues, and their tentative tone, as they described the scope of contemporary particle physics. The materialist consensus, and bedrock of certainty, which characterized post-Newtonian method in the natural sciences was absent. Absent also was any sense of the Victorian certainty of our capacity ultimately to classify all human experience: an approach which, as I daily knew, still was - still is - popular among social scientists, as they apply to their speculations what they take to be the objective principles of natural science.

The approach of the physicists this day more resembled that of Newton himself, who famously, and modestly, claimed: *"I do not know what I may appear to the world, but to myself I seem to*

and the response:

Dear Sir, Your astonishment's odd
I am always around in the quad
So I see that that tree
Continues to be
I remain, Yours sincerely, God

Consciousness indeed is a "hard problem". Less hard, in the dualism of mind and body, is the fate of the mortal remains of great thinkers.

The fruits of their conscious minds - we preserve in recollections, writings, and, pervasively, in what have become our instinctive scientific, social, and political values.

The clash between veneration of the old, and absorbing the philosophical implications of the new, each are a lively source of much human endeavor. They often are inextricably intertwined.

Rene Descartes leads the odd list of modern philosophers whose mortal remains, like those of medieval saints, enjoyed a posthumous afterlife down the years. As did the creative fruits of their conscious minds - in a very incarnation of cartesian dualism.

Cartesian dualism has been described⁴ as the idea that the world comprises two independent, substantially real things - matter, which is characterized by qualities such as extension - and mind, which is defined in terms of an immaterial substance, such as the 'spirit'.

Descartes asserted: "*Je pense, donc je suis*": *Cogito ergo sum*: *I think, therefore I am*; or *I am thinking, so I exist*. He proposes that the body works like a machine, has material properties, and follows the laws of physics. The mind (or soul), on the other hand, is a nonmaterial entity that lacks extension and motion, and does not follow the laws of physics. Cartesian dualism set the boundaries for philosophical reflection of the mind-body problem for years after Descartes.

Heisenberg says⁵: "*This partition has penetrated deeply into the human mind during the three centuries following Descartes, and it will take time for it to be replaced by a really different attitude toward the problem of reality*".

Heisenberg postulates a new quantum paradigm. The physicist Henry Stapp sums up the history like this⁶: "*The basic idea of 'modern' science [following the ideas of Bacon, Descartes and Newton] was 'materialism': the idea that the physical world is composed basically of tiny bits of matter whose contact interactions with adjacent bits completely control everything that is now happening, and that ever will happen. This materialist conception of reality began to crumble at the beginning of the twentieth century with Max Planck's discovery of the quantum of action, [which] led to a complete breakdown...of the classical material conception of nature. Under this*

new [quantum] theory...the consciousness of the human observer is ascribed an essential role...A common core feature of...quantum theory is the incorporation of efficacious conscious human choices, into the structure of basic physical theory".

Descartes lived on in both mind and matter.

His method ordained much of scientific discourse before the advent of quantum mechanics: And his mortal remains had the iconic afterlife of sacred relics. Descartes first was buried in Sweden, where he had come to instruct the Swedish queen.

Sixteen years later, in 1666, his remains were dug up, and sent to France. In Paris, the bones were re-interred at St. Genevieve. Recounting the event, Russell Shorto writes⁷: *"The model - Catholic treatment of holy bones as relics - was so closely copied in all its particulars that it isn't even right to speak of the reburial as a secular co-opting of a religious event. It was a religious event - an attempt to carry the scientific perspective into a world circumscribed by religious awareness".*

For a century, while Descartes's pioneering influence became⁸: *"part of the natural property of the human mind"*, he lay undisturbed. But then Enlightenment and Revolution came to France. A replacement St Genevieve was nearly built when revolution struck. Liking its classic style, the state made it a secular Pantheon - a resting place for heroes, which it is to this day.

Meanwhile, the National Assembly was deciding whose burials ought to be "pantheonized". For instance, Voltaire was in, so were Marat and Mirabeau, but they only temporarily - for opinions shifted fast, and they both were quickly "depantheonized".

But what of Descartes? While the Assembly pondered, graves in old St. Genevieve were looted. Coping with the revolutionary glut of bones - royal and religious - was the job of Alexander Lenoir, Guardian of Monuments.

Despite a sonorous edict duly to "pantheonize" Descartes, revolutionary press of business, and of relics, ancient and modern, was such that Lenoir buried what remained of Descartes, with others, in the Jardin Elysee of his museum. When the monarchy came back after Napoleon, Lenoir's macabre exhibits either were restored to their previous resting places, or were sent to St. Germain de Pres - Descartes's fourth laying to rest. When the casket was opened, most of the bones, including the skull, were missing.

In 1821 a Swedish paper announced that "the skull of the famous Cartesius went for auction". The skull, if it was Descartes's, eventually arrived in France, and was the object of feverish studies of phrenology, and cranial capacity, as the age of Darwin dawned. In 1912, a flood washed away much of the collection where it was stored, and the skull of the philosophical father

of France was lost. The Literary Journal reported that "this...arouses definite emotion". The uproar provoked another search, and the skull was found.

Now, it was analyzed against the Frans Hals portrait of Descartes at the Louvre. But, if there was a Hals portrait of Descartes, for good reasons adduced by art historians it probably is not the one in the Louvre.

The necreographer of the remains sums up: *"We are all philosophers because our condition demands it. We live every moment in a universe of seemingly eternal thoughts and ideas, yet simultaneously in the constantly churning and decaying world of our bodies and their humble situations. We are graced with a godlike ability to transcend time and space in our minds but are chained to death. The result is a nagging need to find meaning. This is where the esoteric 'mind-body' problem of philosophy professors becomes meaningful to us all, where it translates into tears and laughter"*.

Another whose mortal remains had lively posthumous times, and whose political, philosophical and religious stance also much influenced human events, is Thomas Paine.

The tale of Paine's remains did not end with his burial in New Rochelle. William Cobbett decided that Paine's bones should be shipped to England, and there entombed in his honor.

The trouble was: Cobbett dug them up, and took them to England, but never got round to burying them, and they, like those of Descartes, enjoyed as itinerant and improbable a life as any revered relic. Cobbett died in 1835, leaving the bones in a box at his Surrey farm⁹. They passed to the auctioneer of his effects, whose proceeds were needed to pay debts.

There recently had been some doubt in law as to whether human remains could be used for this. Therefore a ruling was needed from the lord chancellor, which never came. By default, the bones went with all of Cobbett's effects to a local farmer.

The farmer invoked the help of Ben Tilly, Cobbett's former secretary, now a tailor in London, who took the box. When his effects were sold, so were the bones, and they fade from history.

Paine's biographer records that in 1849 the empty casket was with a citizen of Guildford. In 1854 a Unitarian minister claimed to have the skull and right hand¹⁰. Part of Paine's brain was bought for \$5 in London by Moncure Conway "to stop its being hawked about".

In a ceremony in 1905, this remnant was reinterred in Paine's New Rochelle memorial.

Our family feels a kinship with Paine. His farm is close to land farmed in Paine's time by my wife's Gedney ancestors in Mamaroneck. Also, a family clock we have at home, as its face announces, was made by Willet Hicks, clock maker of New York, quaker (which had been Paine's sometime persuasion), ancestor of my wife, and one of the small number who attended

the dying Paine, and his burial at his New Rochelle farm. Despite Hicks's urging, the quakers declined to bury Paine in their yard, for his religious views were thought unusual.

His American burial place is close to our former home in Westchester. The cottage on Paine's farm is preserved thanks to valiant efforts of the New Rochelle Historical Society, and of John Wright, a friend, and distinguished eighteenth century re-enactor, who lives there. He tolerated frequent visits of our young sons and other unruly friends to see his collection of colonial games and artifacts.

These include a musket, loaded unbeknown to the boy scouts with blanks, with which he entranced them by ostensibly firing at squirrels, while extolling their culinary excellence. An extraordinary waxwork of Paine sits in his parlor chair, posing with such as my mother-in-law: a fitting conjunction, for she is a bibliophile.

John once gave me a copy of documentary evidence which substantiated my wife's family tradition that her Allaire ancestors were among the founders of New Rochelle, who as French protestant Huguenots were expelled from La Rochelle, France when, in 1685, Louis XIV revoked King Henry IV's tolerant Edict of Nantes.

Tom Paine accomplished much, and generally needs little introduction over here, yet is but lightly esteemed in his Sussex and Norfolk homes in England. Introduced to Philadelphia society in 1775 by Benjamin Franklin who was then in London, Paine's book, "Common Sense", published in January 1776, was viewed by colonists, for and against, as the catalyst for popular assertion and acceptance of two principles: first of independence, second of republicanism, neither of which yet were firmly, nor generally, in vogue. And he coined the term: "United States of America",¹¹ which also, still, is in vogue today.

John Adams, the abrasiveness of whose relationship with Paine resembled his others, said of him: "History is to ascribe the American Revolution to Thomas Paine"¹². This was a view shared by many, if only in the sense that matters with England might have been more amicably concluded without Paine's help.

Work on one's paper can go down interesting byways. A comment in a book on Paine led me into the arcane world of the education of princes.

For Paine's work "Common Sense" brought a novel element to the ruminations of colonial leaders. He ditched the comfy fiction that the colonists were loyal subjects of an ill-ministered and ill-advised monarch, and turned his pen on George III himself. Later, Jefferson adopted the same style in drafting the Declaration of American Independence.

Why was this? In 1764, in England, Paine took up the unpopular local job of Excise Officer, or collector of taxes on such basic essentials as tobacco and alcohol. It was an unenviable job:

excise men were disliked by taxpayers, and were threatened by smugglers wanting to avoid tax. It was not lucrative, and could be dangerous.

Economic conditions were increasingly unfavorable to this unpopular group. And, in an early foray in written advocacy, Paine crafted his colleagues' petition to Parliament, for ameliorating their condition. Presaging the impact of his 1776 "Common Sense", the good reception of his petition led the excise men to make Paine their spokesman at the bar of Parliament.

Arriving in London, and expecting logic and clarity to carry the day, he was quickly disabused. He made new friends in London: first Benjamin Franklin, who already had cause for a more realistic grasp of the political workings of the time, and second, George Lewis Scott, Commissioner of Excise, with whom Paine worked. Scott had for six years been tutor to the young George III as Prince of Wales. Paine later said it was Scott who "acquainted me with the true character of the present king"¹³.

We learn much of royal temperament, and of the arbitrary nature of royal education, from the reminiscences of court gossips, lords of the bedchamber and their ilk. One such was the Earl Waldegrave - Governor, or senior tutor, to the Prince - and hence the boss of Scott. He wrote, indiscreetly:

"[The Prince of Wales - that is the future George III] has Spirit, though not of the active kind, and does not want [for] Resolution, but it is mixed with too much obstinacy. He has great command of his Passions, and will seldom do wrong, except when he mistakes wrong for right; but - as often as this shall happen, it will be difficult to undeceive him, because he is uncommonly Indolent, and has strong Prejudices. His want of Application, and Aversion to Business would be far less dangerous, was he eager in the pursuit of Pleasure; for the Transition from Pleasure to Business is both shorter and easier, than from a State of Total Inaction... Whenever he is displeased, his anger does not break out with Heat or Violence, but he becomes Sullen, and Silent, and retires to his Closett; not to compose his Mind, by Study or Contemplation, but merely to indulge the melancholy Enjoyment of his own ill Humor"¹⁴.

One biographer¹⁵ of George IV, referencing another¹⁶, says that he was "neither the first, nor the last, to depict George III's court as one of Teutonic tediousness, infected with the lurking bacillus of continental absolutism". Others spoke of the "harsh and despotic parental regime laid down by George III".¹⁷

Moreover, an education designed:

"to ingraft the free and independent spirit of the British Constitution on the despotic and absolute principles of German aristocracy, was ill calculated to make him either a prudent prince, or a great monarch". Rather, after his twenty-first birthday in 1783, the future George IV "plunged at once into the joys of Society with all the avidity of the fainting traveler, who hastens to the gushing spring, to allay the torments of his thirst".

When George IV died in 1830 “The Times” thundered: *“there never was an individual less regretted by his fellow-creatures than this deceased king”*¹⁸. As the contemporary ditty had it:

“And when from Earth the last descended
Thanks be to God, the Georges ended”.

Tom Paine believed his plea to Parliament fell victim to the tyrannical traits of George III, reflected in the opaque intransigence of his administration. Tom certainly had his revenge. That is, if one is to regard this Republic as a success.

Moncure Daniel Conway, Paine’s eminent 19th century biographer was pastor of the church in Washington DC where some years later my wife and I would marry.

Conway shares with such as Samuel Pepys, and Sir Richard Burton, the capacity to convey, in vivid writing, an almost timeless impression of events and issues, and of the conversation, and doings, of friends and others.

Richard Burton smuggled himself into Mecca and Medina. His reports, like those of his lengthy talks with Brigham Young in the muddy village which then was Salt Lake City, are captivating.

Similarly, Conway writes colorfully and perceptively about his life, friends, and ideas, each of which range widely. And he does so with the propinquity and familiarity of a diary.

He came to Washington from Virginia, and Harvard, with settled anti-slavery views which set him at odds with family, friends and congregation. The upshot was that he was called from Washington DC to the First Congregational - Unitarian - Church of Cincinnati in 1856. In his autobiography¹⁹, Conway gives as lively an account as I have seen of contemporary Cincinnati - its distinguished visitors, foibles, and civic and religious leaders.

He writes *“Cincinnati was the most cultivated of the western cities. A third of the population being German, there were societies devoted to music, and in that art the city was ahead of all others in America except Boston...There was an admirable literary club, which met every week to converse and regale itself with squibs, recitations, cigars, and Catawba wine. To it belonged young men who afterwards became eminent figures in the world: Rutherford Hayes, President of the United States; Noyes, a distinguished general and Minister to France; A.R. Spofford, librarian of Congress; Judge Stallo (Minister to Italy); Judge James, Judge Manning Force, and others. [Conway's name appears in our records]. There was a good city library, with a Lyceum that had courses of lectures during the winter and enabled us to listen to the most famous public teachers. Emerson, Holmes, Henry Ward Beecher, Wendell Phillips had not yet been superseded in western halls by vaudeville shows.”*

In 1863, Conway moved to London, charged to explore and influence English views in relation to the American civil war. In due course, he became minister of the South Place Chapel, which soon left fellowship with the Unitarian Church, and gained renown as the South Place Ethical Society.

Conway's ideas on science and life, like those he much admired in Paine, before him, evolved in the temper of his times. His thinking continued to move from Emersonian transcendentalism toward a more humanistic "freethought".

His friends, whom he describes in lively and generally affectionate detail include Browning, Carlyle, Salmon Chase, Darwin, Dickens, Emerson, Garibaldi, Lincoln, Cardinal Newman, Gilbert of the operettas, Ruskin, Alfonso Taft, Thoreau, Mark Twain, Rabbi Isaac Wise, and many others.

But let us return to the realm of mind and consciousness of the human observer.

Thoreau says: *"Men esteem truth remote, in the outskirts of the system, behind the farthest star, before Adam and after the last man ...But all these times and places and occasions are now and here"*²⁰.

In poetic anticipation of later scientific orthodoxy, Emerson had said in 1840²¹: *"The Universe is represented in every one of its particles. Everything in nature contains all the powers of nature. Everything is made of one hidden stuff...There are no fixtures in nature. The universe is fluid and volatile"*

Our musings - on Descartes, Paine, Emerson, Conway - perhaps reflect the interplay of physics, energy, matter, and metaphysics, which happens when kings and clock-makers, philosophers and tax collectors, physicists and poets, clergymen and biologists, ponder the meaning of life, and the mysteries of creation.

The Dalai Lama says: *"It is conceivable that quantum physics, with its logic-defying notions of non-locality, the superposition of wave and particle properties, and Heisenberg's uncertainty principle, could offer deeper insights into specific areas of cognitive activity...At least in my view, as long as the subjective experience of consciousness cannot be fully accounted for, the explanatory gap between the physical processes that occur in the brain and the processes of consciousness will remain as wide as ever"*.

Max Planck, the founder of quantum theory, and one of the great physicists of the twentieth century says²²: *"Science enhances the moral values of life because it furthers a love of **truth** and **reverence** - love of truth displaying itself in the constant endeavor to arrive at a more exact knowledge of the world of mind and matter around us, and reverence, because every advance in knowledge brings us face to face with the mystery of our own being...Science cannot solve the*

ultimate mystery of nature. And that is because, in the last analysis, we ourselves are part of nature and, therefore, part of the mystery we are trying to solve".

So, mortal remains are revered like those of saints. Yet, the fruits of the consciousness of Descartes and Paine join Newton, Darwin, Einstein, in exploring the mystery of spirit, mind and matter: as unbounded a quest in our contemporary speculations as at any past time.

We shall continue to seek out how to reconcile the accelerating insights derived from scientific method, and their inspiration in the miracle of human consciousness.

Like my ski instructors of yesteryear, like settlers in Cincinnati, and like a pride, or shame, of kings, people from Germany also lead much human advance in physical and metaphysical insight, with gratifying results, but inconclusive outcomes. The big mysteries live on.

Heisenberg seeks to: *"counter the misapprehension that natural science and technology are concerned solely with precise observation and rational, discursive thought. To be sure, this rational thinking and careful measurement belong to the scientist's work, just as the hammer and chisel belong to the work of the sculptor. But in both cases they are merely the tools and not the content of the work".*

Let us, for the time being at least, give Einstein the last word²³: *"It is in striving after...rational unification of the manifold that [science] encounters its greatest successes... Whoever has undergone the intense experience of successful advances made in this domain, is moved by profound reverence for the rationality made manifest in existence, and... attains [a] humble attitude of mind toward the grandeur of reason, incarnate in existence".*

And he concludes: *"Those whose acquaintance with scientific research is derived chiefly from its practical results easily develop a completely false notion of the mentality of the men who, [like Kepler and Newton], surrounded by a skeptical world, have shown the way to kindred spirits... through the world and the centuries. Only one who has devoted his life to similar ends can have a vivid realization of what has inspired and given them the strength to remain true to their purpose in spite of countless failures. It is cosmic religious feeling that gives a man such strength."*

[ENDS]

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