

Posthumanism and the challenge of new ideas

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At a time when science and technology are developing at such a rapid pace it is chastening to be reminded that in the development of metaphysical ideas we have moved little beyond the ancient Greeks. Alfred North Whitehead characterised the European philosophical tradition as “a series of footnotes to Plato”, implying that on the deep problems — the nature of reality, mind, being and experience — the last two and a half millennia have brought us little closer to resolution or consensus.

One reason may be that throughout much of the humanist period of history (which can be traced back to Plato’s era) we have tended to rely on the same essential beliefs and assumptions about the nature of reality, beliefs and assumptions often regarded as self-evident, foundational and permanent. It has been assumed, to give some examples, that the universe is full of numerous distinct bodies or objects each demarcated by a boundary at its extremity; that the mind reflects upon a world from which it can be distinguished; that we are each separate from one another and the things in the world around us; that a proposition cannot be both true and false at the same time.

Despite the strength and depth of these beliefs it is surprisingly simple to show, without recourse to occult precepts, perverse reasoning or sleight of hand, that each is erroneous. Such seemingly commonsensical ideas can be invalidated with little more than orthodox scientific knowledge and straightforward descriptions of the phenomena concerned.

To take the case of the belief that we are surrounded by discrete bodies or objects, each having a boundary or edge at its extremity. While at a certain level of engagement with the world it is natural to regard objects around us in this way, a more objective view would recognize that boundaries are in fact arbitrary and contingent, which is to say they can only be determined with relative precision and only at certain levels of viewing resolution. What appears to us at one level of resolution as a sharp edge, say on a piece of paper, turns out on closer inspection to be an inchoate mass of fibers, becoming ever more formless and indeterminate as we approach sub-atomic levels of magnification. No finite boundary is ever reached.

Or to take the belief that the mind is distinct from the world. One could sustain such a belief only if were possible to point to either (a) any border where the mind stops and world starts, or (b) any attribute of the world not encompassed by the mind. The first is clearly impossible, if only for the reasons already discussed, i.e. boundaries cannot be absolutely demarcated, and the second is impossible for the reason that nothing can be conceived in the world that does not then become a part of the mind conceiving it. We are forced to acknowledge a fundamental continuity between mind and world, and indeed other minds, a continuity that renders any discussion of their separateness futile.

Or to take the belief that we are each individual beings, unique and quite distinct from others and the world around us. This cannot be true for both the reasons just discussed — that boundaries, including the boundaries around our bodies, do not actually exist in the way we ordinarily perceive them to exist, and our supposedly individual minds are in fact widely distributed across a reality containing countless other such minds — but also for many other reasons, including the fact that the genetic material from which we are constructed is overwhelmingly identical in us all, variations between individuals being miniscule. Moreover, the human body is in constant and direct reciprocation with forces and substances around it: the liquids, gases and solids, the chemical, thermodynamic, kinetic and other kinds of energy, the gravitational forces and various forms of radiation. To think of all these as somehow separate or distinct from bodies composed entirely of just such materials and energies makes little sense. The body is a porous, membranous and fluid system in perpetual change and exchange with the environment.

These briefly presented examples are not intended to comprehensively refute the habitual beliefs in question. They are offered merely as signposts to a different way of thinking. But it is by thinking differently, not just by engaging in philosophical arguments, that we can move beyond the engrained beliefs that have constrained our conception of reality for more than two millennia. If we chose to we can conceive of reality not as populated by numerous discrete objects but as a variegated plasma of constellated energies, neither solid, liquid nor gas. We can think of the mind not as a quasi-mechanical computation occurring in an internal organ but as an expansive field of experience that both generates and is generated by the reality it conceives. We can think of ourselves not as isolated agents trapped in a dermal shell, but as boundless clusters of activity blurring into space and time.

As we start to conceive reality and ourselves in profoundly different ways many of the long-standing metaphysical debates recurring through the history of humanist thought begin to evaporate. The problem of whether or not the world exists independently from the mind, for instance, is avoided because the mind and world are now seen as identical. The difficulty of determining where consciousness is located in the brain is sidestepped since consciousness is no longer regarded as a phenomenon solely attributable to the brain. The ethical debates concerning the supposed supremacy of humans and the rights of the individual are effectively defunct when faith in the apotheosis of our species and the existence of individuals is renounced.

Elsewhere I have used the phrase ‘the posthuman condition’ to signify the collective shift in the way we understand ourselves and the world at this time in history. Posthumanism refers not to the imminent demise of humankind through some technological catastrophe or biological redundancy but to the period of social and cultural development succeeding humanism. In the posthuman era we no longer regard objects in the world as discrete and bounded but indeterminate and indefinitely extended. The mind is no longer a central processor but a massively distributed array of sentient correlations.

Human beings are no longer unique and pre-eminent in the universe but merely points of reference in an inconceivably large and complex cosmos.

As we try to think in these unfamiliar ways we struggle to find modes of expression that give shape and meaning to concepts verging on the inconceivable. Coming to terms with our changed condition consists not just in revising customary beliefs but in fully cognizing the implications of what must replace them. The challenge presented by the succession of posthumanism is how we can think in radically different ways from those we are used to.

There is one idea so ingrained in our habitual modes of thought that it seems almost heretical to dispute its validity: the belief that truth and falsity are mutually exclusive. Aristotle famously argued in the *Metaphysics* that something cannot both be and not be. This assertion has become known as the law of non-contradiction — a law so axiomatic it has barely been examined or challenged since its inception. It would seem to be a cardinal case of unthinkability that one could conceive a situation in which a statement was both true and false at the same time, truth and falsity being so clearly incompatible states.

But consider what happens when Man A says to Man B, “You always contradict me.” and Man B replies, “No I don’t.” In this variation on the classical Liar’s Paradox attributed to Epimenides, truth and falsity seem to repel each other like identically charged magnets. If Man A is telling the truth then Man B is lying, and if Man B is telling the truth then Man A is lying. According to classical logic this results in a paradox, a kind of conceptual impasse beyond which we cannot move. Both statements seem reasonable but both cannot apply since they are contradictory. There is, however, an alternative interpretation: that both Man A and Man B are telling the truth and lying at the same time. Rather than struggling for priority truth and falsity simply exist simultaneously.

By contemporary logical standards it is by no means absurd to suggest propositions can be both true and false at the same time. There is a branch of (admittedly controversial) logic known as dialetheism that considers paradoxes like the one above and accepts that in certain instances truth and falsity do indeed co-exist. Such ‘true contradictions’, as they are sometimes called, are regarded not as aberrations to be dispelled by rational analysis but valid states in their own right. Take the question of what we can know about the unknown. Clearly we can know nothing about the unknown, and in knowing this we know something about it — a contradictory state of affairs that is nevertheless perfectly true. (This example is discussed by one of the founders of dialetheism, Graham Priest, in his book *Beyond the Limits of Thought*, 2002).

The idea that contradictions might be embraced rather than neutralized by rational analysis will seem repellent to those wedded to a classical logical framework. But if we look around the world we soon see how the co-presence of opposing forces underpins many natural processes. Some years ago I saw a television programme demonstrating the Newtonian principle of equal and

opposite force. An inflated balloon was attached to a small boat and released onto a pond, the air expelled from the balloon driving against the surrounding atmosphere to propel the craft forward across the water. I was struck as I watched this demonstration that the force of the expelled air meeting the resistance of the atmosphere on equal terms resulted in a kind of 'true contradiction' — a mutual antagonism — leading not to a logical abyss but to natural physical motion.

It is easy for us to overlook the essential role contradictory forces play in the makeup of our world. That, for example, our bodies are continually drawn downwards against the floor which presses back against us, and how we're prevented from collapsing into a formless heap by the integrity of our skeletal structure as it resists gravity. At each moment where we see form or motion we are seeing the consequence of opposing forces in play, an elaborate mesh of tensions and pressures holding nature in its delicate balance. The very structure of the atom, long regarded as a fundamental unit of reality, is maintained by the repulsive action of electromagnetic force pushing sub-atomic particles apart while an opposing strong nuclear force binds them together.

Although it may seem desirable to think of these conflicting pressures as somehow neutralizing in a tension-free resolution — just as it may seem desirable to neutralize contradictions and paradoxes through rational analysis, a task into which countless logicians have thrown themselves — it would be a mistake. What is essential to the structure of reality is that tension is maintained, that opposing forces co-exist in mutual conflict not dissolve into conformity. Harmony and equilibrium may appear outwardly as the consequence of this tension, but the underlying incompatibility between forces must remain if form is to be sustained.

An elegant example of structural harmony arising through mutual antagonism can be found in the principle of 'tensegrity', a sculptural and engineering term describing the building of complex forms using simple elements held in balance by opposing forces. The term is compound of 'tensional integrity' devised by Buckminster Fuller, but the discovery of the principle was made by one of his former students, the sculptor Kenneth Snelson. The word now has many meanings, but in its original form it refers to an arrangement of rigid struts held in balance by the tension of cables compressing the structure at key nodal points, something akin to the way a tent is held in shape by rigid poles and taught guy ropes. Crucial to the integrity of the structure is the antagonism between the forces of tension and compression (what Snelson calls 'floating compression'), which arises from a duality of deep significance in the makeup of natural forms, as Snelson himself suggests:

"When two objects cross one another, two axes are created along the diagonals; one has a right-handed, clockwise helix and the other a left-hand or counter-clockwise helix. This, along with magnetism with its north and south polarities, electrons and positrons, is the very root of binariness. This duality which occurs at every crossing teaches the first lesson about the nature of structure."

Binaries and dualities are nothing new, nor is it particularly surprising to note the role of tension and compression in the formation of structures. What is different is the way we think about and understand these concepts once we have moved beyond the limitations of the humanist-rationalist paradigm, when we no longer think of opposites (like truth and falsity) as mutually exclusive but as mutually supportive, when we no longer think of the binary as 'either-or' but 'either-and-or', not 'on-off' but 'on-and-off' at the same time.

I accept the inherent difficulty, perhaps impossibility, of conceiving a state that is both off and on at the same time, certainly for minds used only to thinking of these states as mutually exclusive. Yet we are surrounded in nature by processes that operate in contradictory ways. The biological membrane — a basic component of all cellular structures and so of life itself — acts in two opposing ways at once: it forms a barrier that separates the contents of the cell from its surroundings, so ensuring its proper function and integrity, and at the same time acts as a conduit for passing organic compounds between the cell and its surroundings, again to ensure its proper function and integrity. The cell membrane *both* divides and connects, these functions being absolutely vital, but nevertheless contradictory.

The biological membrane, then, can serve as a useful metaphor in helping us to visualize a condition that in other contexts might seem incomprehensible. Just as the membrane both divides and connects, so propositions can be both true and false, conditions can be either and or, states can be both on and off (an example would be the switch that controls the release of the poison gas in the famous Schrödinger's Cat analogy about quantum-level indeterminacy. Until observed the switch is, probabilistically speaking, both off and on). I suggest that as we gain conceptual maturity we will come to think more readily in this way, acquiring a greater flexibility and subtle capacity for reasoning, even if for some it means we are courting irrationality (as was the case with Einstein, who resisted the Copenhagen interpretation of quantum mechanics which Schrödinger's analogy was meant to illustrate because he did not think God would play dice).

Analogies and metaphors can be useful in helping us to visualize difficult to grasp ideas, but if we are looking for their contemporary applications we could do worse than look to artists, who frequently inhabit the difficult terrain at the frontiers of human knowledge. Artists will often take on the intellectual challenges thrown up by their age and, most importantly, give those ideas visual form by exploring them in their work. We only need think of the great Renaissance masters' vivid images of the humanist prowess of fifteenth century Europe, with their sophisticated optics and geometry, or the Constructivists who created striking plastic manifestations of the revolutionary modernism gripping the early-twentieth-century imagination. Artists do not necessarily originate new scientific and philosophical ideas, but they are often among the earliest to embrace and respond to them, and certainly among the first to express them in visual form.

The sculptural and architectural works of Philip Beesley stand in this venerable tradition. Many of the symptoms of the posthuman age are evident in Beesley's polysemic constructions, which variously invoke biological tissue, sculpture, textiles, architectural forms, complex geometries, digital replication, and organic systems. They are often startling, almost alien, yet can also seem natural and familiar. They suggest a conception of reality in which living matter is continuous with inert matter, where complexity and simplicity co-exist, where the body permeates beyond the membrane of the skin into the space around it, where each individual element is absorbed into the structure as a whole, where the built environment is an intelligent and conscious extension of the beings that occupy it.

In many ways Beesley's constructions are sensitive reflections of ideas that are starting to surface in the intellectual landscape of our time. Like many artists before he makes work that gives visual form to inherently evanescent ideas, ideas rarely expressed beyond the confines of specialist science, mathematics and philosophy, and which by their very nature resist articulation or comprehension. This is not to suggest his works operate didactically or as literal illustrations; they are too diverse and ambivalent for that. Such ideas can only be expressed metaphorically or poetically, which is why art retains such importance in our culture as a pre-eminent vehicle for alluding to new concepts, and why it so often eludes explanation itself. Art, by necessity, can appear abstruse and even repellent because we are yet to catch up with the novel thoughts it synthesizes.

It would be misleading to close this essay without correcting the impression I may have given that the posthuman conception of mind, reality and nature as summarised here actually contains any new or original ideas. Precedents can be found in Hegel, Schopenhauer, Nietzsche, Husserl and many other thinkers who have struggled to overcome the constraints of the European intellectual heritage. But they are most eloquently and explicitly expressed in the eastern tradition, particularly in the many schools of Buddhism and Zen. As I read these ancient texts, which are the products of a very different time and culture to my own, it is strangely reassuring find the ideas I vainly believed to be my original insights clearly set out by others so long ago. Just as Beesley's work seems both alien and familiar, so it is both comforting and disconcerting to realise everything apparently new is already old.

References

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