Abstract

Teilhard's *The Phenomenon of Man* was posthumously published and has been retranslated as *The Human Phenomenon*. It presents humankind in unity with an evolving world, locates parts in relation to the whole, and balances the perspectives of the outside and the inside. Key aspects include the tangential–radial energy distinction, axes of evolution, the noosphere and personalization. Although Teilhard regarded it as a scientific work, he leaves space for the theological notions of ensoulment, monogenism and the supernatural, and derives his hypothesis that Omega is a point of evolutionary convergence from scripture. Today, Teilhard's cosmic vision appeals to some and the global context he defines is ecologically significant, but his dense theorizing may obscure or detract from basic elements of Christian belief.

Keywords: complexity, convergence, energy, evolution, noosphere, Omega, theology

The posthumous fame of the French Jesuit Pierre Teilhard de Chardin (1881–1955) was due in large part to his silencing during his life. His ideas become widely known only in the 1960s, when more people gave them a liberal and secular interpretation than would probably have done so during his lifetime.

A palaeontologist working when fossil excavation was the equivalent of today's human genome mapping, Teilhard proposed an ambitious new synthesis of theology and evolution that called into question received theological interpretations of Adam, paradise, sin and the fall. He had come to the attention of the Roman Catholic authorities in the early 1920s, after a research paper exploring the theological implications of his developing synthesis reached Rome. Fearful that classic dogmas would be undermined, the authorities despatched Teilhard to China. There he was at liberty to continue his research in a region newly opened to the wider world that was awaiting scientific discovery. However, he was cut off from the theological and philosophical debates taking place in Europe.

The book here being revisited was written between 1938 and 1940 in Peking, where Teilhard had an office at the China Geological Survey and was part of the research community at the Cenozoic Research Laboratory. Transcending the intellectual, social and political concerns of contemporary Europe, his horizon was the whole of biological life. During the later 1940s it appeared possible that the Church authorities might allow *The Phenomenon of Man* to be published. However, permission was ultimately refused, and following the highly conservative 1950 papal encyclical *Humani generis* publication during Teilhard's lifetime was no longer a realistic objective.

As a Jesuit, Teilhard had always remained obedient both to his highly-disciplined order and to the Roman Catholic Church. His secretary Jeanne Mortier, whom he appointed his literary executor, did not share these obligations. After Teilhard's death on Easter Sunday, 1955, she collaborated with a range of academic experts, as well as Teilhard's former colleagues, friends and family, to publish his collected works. The first volume was *Le phénomène humain*, which came out before the year's end. Translations soon followed, and in 1959 *The Phenomenon of Man* appeared with Collins, translated by the Roman Catholic author and scholar of Italian and French literature Bernard Wall (1908–74). The book included an introduction by the evolutionary biologist, internationalist and educationalist Sir Julian Huxley, whose grandfather Thomas Huxley, known as

---

1 Corresponding author: David Grumett david.grumett@ed.ac.uk

‘Darwin’s bulldog’, had set out to destroy natural theology and replace it with a purely secular evolutionism. Huxley junior wrote of Teilhard: ‘Though many scientists may, as I do, find it impossible to follow him all the way in his gallant attempt to reconcile the supernatural elements in Christianity with the facts and implications of evolution, this in no way detracts from the positive value of his naturalistic general approach.’ (Teilhard 1959.19) As this assessment shows, Teilhard drew a wide readership, appealing both to secular evolutionists, and to Christians who wished to connect their faith to the facts of biological evolution.

**A Synopsis**

In 1999 a new translation of *Le phénomène humain* by the poet and scholar Sarah Appleton-Weber (1930–2013) was published by Sussex Academic Press. It was titled *The Human Phenomenon*. While acknowledging the profound impact of Teilhard’s work on her own spiritual vision and writing, Appleton-Weber was critical of aspects of the original translation. Chief among these was its identification of *le phénomène humain* with ‘the phenomenon of man’ (xviii). Apart from its gendered connotations—which, curiously, Appleton-Weber does not pursue—this suggests that Teilhard was concerned with humankind as a completed species in isolation from other species. However, both the original French title and the revised English title indicate a focus on phenomena, with humankind viewed in its unity with the world’s whole evolutionary trajectory, and parts of the world understood in relation to the world as a whole.

The book comprises four parts and important front matter. In opening, Teilhard states that it is not a work of metaphysics or theology but a purely scientific study. It does not, he emphasizes, seek to explain the world, but merely offers prolegomena, leaving ‘essential and ample room’ for the ‘more advanced reflection of the philosopher and the theologian’ (1/29). Readers should keep these qualifications in mind, as they will be elaborated later. Teilhard then offers a splendid prologue titled ‘Seeing’, which poetically unfolds his phenomenological approach (3–7/31–6). The whole of life, he writes, consists in seeing, and the growth of unity depends on seeing. Humans view the world subjectively, but because they have shaped it using their own cognitive structure now rightly also regard it as objective. The world we encounter is the world that we have made: we are centres of perspective but equally centres of construction. Any explanation of the universe must therefore combine spirit and matter, the inside and the outside. The complementarity of these aspects is a recurring theme.

Part I is titled ‘Prelife’ and begins with the ‘outside’ of things. Elementary matter is primordially plural but exhibits a collective unity, being held together in a state of interdependence. Atoms are incorporated and bound together by a ‘mysterious identity’ (13/42), which may be identified with energy. Matter is thus viewed in its totality, with every part interconnected with every other. Gravitational force may be a useful image for what Teilhard has in mind here, although he does not himself make much use of this image. Matter is not static but evolves according to complexification (18/48), and its behaviour may be described using numerical laws. Teilhard now turns to the ‘inside’. Consciousness is not restricted to humans but is indefinitely prolonged through space and time. The more concentrated that consciousness becomes, the more complex the matter associated with it. Although consciousness is thereby not in competition with matter, development consists in the ‘gradual dominance of the inside in relation to the outside of things’ (27/61). Teilhard next considers the relation between material energy and spiritual energy, arguing that there is ultimately only a single, spiritual energy in the world, which absorbs and transforms material energy although is only minimally dependent on it. The fundamental distinction within energy is not between these kinds but between tangential energy, which maintains the interdependence of elements of the same degree of complexity, and radial energy, which attracts elements towards

---

greater complexity (30/64). Although radial energy needs tangential energy, the attraction due to radial energy augments the tangential energy in the world. Thus, at the very high human and social level, the total sum of energy in the world is not merely conserved but increases (31/65–6).

However, this synthesizing movement is traceable back to the simplest crystal and polymer forms.

In Part II, Teilhard moves on to ‘Life’. Just as atoms are the basic constituent of unorganized matter, so cells compose life’s ‘natural grain’ (43/79). Teilhard’s understanding of development includes leaps, or thresholds, and he presents the appearance of cells as an ‘awakening’ that is part of the ‘psychic transformations preparing for the appearance of the human phenomenon on Earth’ and may be regarded as a ‘rudimentary kind of consciousness’ (50/88–9). He is agnostic about whether life is monophyletic, with cells initially multiplying from just one or a few points, or polyphyletic, with the passage to large molecules occurring at numerous points simultaneously due to an initial instability. Teilhard notes the recurrence in biological history of this basic question of whether development is from a single stem or in parallel, regarding these as ‘two almost equally plausible hypotheses’ (53/93). In any case, life expands, and the ‘living substance spread over the Earth forms the features of a single, gigantic organism’ (68/112). At the same time, life is aggregated. Using the image of a sheet of water spread over the ground channelling into rivulets, then into streams, Teilhard describes forms concentrating around particular evolutionary axes, from which come individual species. Teilhard appropriates Bonaventure’s ‘tree of life’ language to represent evolutionary phyla fanning out, exploring different possibilities, and sometimes transmuting to form a new species. Deploying the symbol of Mother Earth, he challenges the opinion of many biologists that evolution is undirected. Rather, he states, there is ‘one precise orientation and a privileged axis of evolution’ (92/142). There are good grounds, Teilhard argues, for regarding animals as having a degree of interiority, with mammals especially possessing far more voluminous and folded brains than other vertebrates. The nervous systems of organisms have developed and concentrated in progressive layers. This exterior cerebralization corresponds with an analogous interior ‘installation of a psychic state in the very dimensions of the Earth’ (95/146), which Teilhard identifies with the rise of consciousness.

Moving on once more, the topic of Part III is ‘Thought’, which Teilhard identifies with reflection. This he defines as the ‘power acquired by a consciousness of moving in on itself and taking possession of itself as an object’ endowed with its own particular consistency and value: no longer only to know something—but to know itself; no longer only to know, but to know that it knows’ (110/165). This individualization of thought was prepared for by bipedalism freeing the hands, which relieved the jaws of their prehensile (grasping) function, which in turn relaxed the muscles around the skull, which enabled the brain to enlarge and the eyes to converge (114–15/170). However, reflection emerges not only in the individual, being exhibited in a ‘noosphere’, which, transcending the fossil layers that identify past geological epochs, is an organic totality that transforms and spiritualizes the whole planet (122–5/180–4). Teilhard traces this back to the prehuman fashioning of tools and production of fire, and to Neanderthal cave industry and burials, although believes that Homo sapiens came from a different evolutionary line (138/199–200). Considering today’s Earth, he associates modernity fundamentally with the consciousness of evolution. He writes: ‘Evolution is a general condition, which all theories, all hypotheses, all systems must submit to and satisfy from now on in order to be conceivable and true. Evolution is a light illuminating all facts, a curve that every line must follow.’ (152/219) Yet a fundamental choice must be faced: is nature closed to future human needs, which would perpetuate the spiritual anxiety characteristic of modernity, or does it open onto a higher psychic and spiritual life? (163/233)

In response to this question, Part IV is strikingly titled ‘Superlife’. Thought coalesces due both to the Earth’s finite roundness and to the ‘psychic curvature of mind’, which is a product of the nature of the human psyche as well as of social institutions (172/243). The result is not secularism, but the spiritual renewal of humanity, as matter is ever more closely subjected to spirit, and genetics opens the possibility of controlling heredity. Thus humans come to govern the forces of evolution (177/250). Initially the result appears as a plurality of individual reflections grouped into a single
unprecedented reflective act. However, the monstrosities of Communism, Nazism and other totalitarianisms could also be regarded this way. Teilhard therefore moves beyond the collective to the hyperpersonal. Union, he insists, differentiates (186/262), issuing not in isolated individuality but in personality. This is achieved by love energy, which Teilhard regards as a property of all life that is manifested in its tendency to converge (188–91/264–8). This cosmic love energy is initiated and maintained by Omega, which, functioning as a Prime Mover ahead, is both within the evolutionary series as its end and outside of the evolutionary series as its consummation (193/270–1). Teilhard dismisses pessimistic predictions of the Earth’s obsolescence or destruction, presenting instead a future in which religion and science converge and humans, through reflection, intensify their capacity to transform the world through action, in which the love of the pre-existent and transcendent God is communicated to them (223/309–10).

Critical Issues

Teilhard raises issues in the understanding of evolution that continue to be debated today. The notion that, in the evolutionary process, a dynamic of convergence is at work is now widely discussed. For example, the fact that the camera eye has evolved independently several times seems, it is argued, more than random coincidence. At the atomic level of prelife, Teilhard allows that the evolutionary pathway followed could be randomly determined, with the elements of simple bodies needed to pass through many stages of arrangement and rearrangement. Alternatively, the pathway could be mapped out, with the atomic numbers representing a ‘rhythmic series of states of equilibrium, kinds of fixed compartments, into which nuclei and electrons fall abruptly assembled’ (18/48). At the cellular and higher levels of life, however, Teilhard clearly prefers a model of directed chance, with animate particles, through their profusion, increasing their survival chances and multiplying their opportunities to advance through using ingenuity to learn from past errors (66/110). When evolutionary phyla fan out and explore different possibilities, variety is underpinned by specific repeated outcomes when problems are encountered. Teilhard describes these as ‘life’s solutions’ (82/130) and ‘specific solutions for the problem of life’ (112/167).4

As was earlier stated, Teilhard did not consider The Phenomenon of Man to be a work of theology. This is illustrated at three points in his text, where he states that, to be taken further, the exposition would require a step into philosophy or theology. i) He poetically identifies the birth of thought with consciousness ‘leaping and boiling in a space of supersentient relationships and representations’ and being ‘capable of perceiving itself in the gathered simplicity of its faculties . . . for the first time’ (113/169). However, Teilhard notes that this is a merely phenomenological account that does not prejudge what deeper causes might be at work. The birth of thought could, he stresses, be due to a ‘creative operation’ or ‘special intervention’ of God that is beyond scientific investigation. Indeed, some Roman Catholic evolutionists had already proposed that ensoulment was due to divine intervention.

   ii) Teilhard states that, from a scientific viewpoint, the origin of the human species must, like the origin of all species, be viewed collectively. The human, he writes, ‘came silently’ and ‘so softly that when we begin to catch sight of human traces’ a vast continental area is ‘already covered by humans’ living in groups (126/186). The ‘fragile secrets and very first origins of the human being’, Teilhard continues, ‘elude our techniques’, meaning that we should ‘refrain from trying to force and falsify this natural condition with inappropriate questions’. For this reason, he explains, questions about monogenism—the descent of humans from Adam and Eve—‘seem to elude science by its very nature’, because the ‘presence and movements of a unique couple are positively imperceptible and indecipherable’ (127/186). This gap in knowledge may be filled by a ‘transexperimental source of knowledge’ such as theology. Teilhard thereby leaves open a place for scripture in contributing

---

4 These phrases are echoed in the title of Simon Conway Morris’s Life Solution: Inevitable Humans in a Lonely Universe (Cambridge University Press, 2003). Conway Morris is a leading advocate of evolutionary convergence, and a Christian, although his subtitle does not reflect Teilhard’s own view of the implications.
hypotheses about human origins, while maintaining that these are unproveable. Indeed, in
comments elsewhere he suggests that parallel human origins are more probable, in which case
Adam and Eve could be identified with any or all points of origin.

iii) Teilhard views Christianity’s spiritual impetus as intrinsic to the world’s growth, affirming:
The more vast the world becomes and the more organic its interior connections, the more the
perspectives of the Incarnation will triumph’ (213/296–7). He presents a spiritually convergent world
with Christ at its centre ‘organically clothed in the very majesty of his creation’ and, echoing
Ephesians 3:18, able to be experienced ‘through the whole length, thickness, and depth of the world
in movement’. Humans, he writes, may be ‘conscious of being in present relationship with a spiritual
and transcendent pole of universal convergence’ and aware of the ‘perceptible influence in our
world of another and supreme Someone’ (214/298). Despite Teilhard’s careful language, critics
might regard this as pantheism. However, Teilhard adds that this vision respects the ‘theological
thesis of the “supernatural” according to which the unitive contact initiated here and now between
God and the world attains a superintimacy and a supergratuity which humankind can
neither dream of nor lay claim to by virtue of the requirements of its “nature” alone’ (214/298).

Teilhard attributes the human experience and understanding of the world’s spiritual unity not to the
autonomous use of the sense and of reason, but to grace.

The above three points show Teilhard in phenomenal realm gesturing to a reality beyond it.
However, his scientific methodology is inseparable from his Christian faith and theology. Citing Paul’s
image in 1 Corinthians 15:28 of all things being subjected to God so that God may be all in all,
Teilhard writes of Omega: ‘I probably would never have dared to consider or form the rational
hypothesis of it, if I had not already found in my consciousness a believer not only the speculative
model for it, but its living reality.’ (211/294) His identities as a Christian and as a scientist were
tightly interwoven, making possible an integrated spiritual vision of the material world and its
development. This was informed by his deeply analogical vision, in which one reality serves as an
image or prototype for another. For example, through imagery and language he associates the
‘awakening’ of cells out of atomic life with the much later ‘birth’ of human reflection.

Legacy

Teilhard hoped that his oeuvre would deepen the faith of Christians and make the Christian faith
more appealing to the unchurched. However, because his key writings were all published
posthumously, he could control neither their publication order nor their interpretation. The book
here being revisited, which Teilhard himself classified as a work of science rather than theology, was
published first. Ultimately, it was probably more successful in inspiring new visions of global
spirituality among both Christians and non-Christians than in reviving the Roman Catholic Church or
other Churches. Teilhard’s theology and spirituality are to be found in other works, notably Le Milieu
divin, which has been retranslated by Siôn Cowell as The Divine Milieu. This has also inspired many
Christians, although has always existed in the shadow of The Phenomenon of Man, which established
an evolutionary and cosmic hermeneutic for Teilhard interpretation.

Teilhard’s bold synthesis of evolution, energy, consciousness and Christ appeals to those
with strong metaphysical inclinations and cosmic theological sensibilities. I for one believe that it is
basically true, even if some of the science has inevitably moved on, and theology and Christian belief
are not ultimately grounded in these but in Christ. However, from a missionary perspective a
weakness of his work is that those who find Christianity appealing typically do so because of its
straightforward emphasis on love, compassionate personal relationships and community. Although
these are present in Teilhard’s vision, they are frequently obscured by his dense theorizing, which
seems curiously close to the neo-scholasticism that he was taught during his Jesuit formation. In
short, in a world of political, social and economic divisions Teilhard may have overestimated the
appeal of his hyper-modern global sensibility and developmental historiography. Today’s
postmodernists may understandably regard his vision as quaintly outdated. From the perspective of
his huge success in making the natural appear more exciting, some will infer that fewer reasons remain for Christian belief.

Nonetheless, as a scientist Teilhard understood the meaning of objectivity and the importance of grappling with it. Atoms, cells and organisms are identical across the globe. Evolution can only be understood globally, and the sense of finitude due to inhabiting a planet with limited resources and a fragile ecology is even stronger now than when Teilhard was writing. The challenge of synthesis and holistic thinking to which Teilhard rose needs to be met again today, and he may help us.

David Grumett is Senior Lecturer in Theology and Ethics in the University of Edinburgh. He is author of *Teilhard de Chardin: Theology, Humanity and Cosmos* (Peeters 2005) as well as articles and chapters on aspects of Teilhard’s theology.