

## De Chardin's *Phenomenon of Man*<sup>1</sup>

Here is a book which, I imagine, is positively unique. Most of its readers will see it only as yet another attempt to reduce man and his world to materialistic dimensions; to further whittle down the biblical account of the origin of man; and to establish a total evolutionary system, that is one in which the supernatural does not assert itself from start to finish. Everything works itself out by natural processes. It is in fact the sort of book on which the non-supernaturalists would, and have, unhesitatingly put their seal.

But, strange to say and disguised though its theme is, the book may not be that but the reverse. I can see it as a Trojan Horse introduced into the camp of the materialists, an effort to capture them for a theory of the origin and ascent of men which is nothing more than the Christian

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1 Pierre Teilhard de Chardin SJ, *The Phenomenon of Man*, first published by Éditions du Seuil in 1955 in French and by Harper & Brothers (US), William Collins (UK) in English in 1959.

one. This the author, Pierre Teilhard de Chardin SJ, hopes to accomplish by toning down aspects of the Christian story which the scientists have got into the habit of scorning, by investing everything with a scientific gloss, i.e. calling God 'Omega' and by using jargon expressions instead of saying 'God did this'.

The remarkable thing is that he seems to have got away with this to a large extent. That white knight of materialism, Sir Julian Huxley, writes an enthusiastic eighteen-page Introduction, but says that: 'De Chardin's thought is not fully clear to me; and especially where he suggests an emergent divinity, and where he speaks of his trend as a Christogenesis ...I 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" (page 19).

But Sir Julian goes on to say that these things 'in no way detract from the positive value of De Chardin's naturalistic general approach'. This latter phrase appears to express the mind of De Chardin himself. For on page 29 he insists that his book is to be read purely and simply as a scientific treatise. He adds that the book deals with the whole phenomenon of man.

My comment here is that there is either a complete misunderstanding at work between Sir Julian and De Chardin, or else that the latter is perpetrating a sheer artifice (though this is repudiated by him on page 292). Sir Julian is judging the book to be Mr Hyde pure and simple, whereas the author intends it to be Mr Hyde evolving into Doctor Jekyll.

This is made plain by the Epilogue and Postscript (which I refer to in future as the Epilogue), which occupy the last few pages (page 291 etc.). When he speaks of his 'book'

he must be including the Epilogue in its scope as a vital, indeed the vital part, whereas Huxley is not really counting it into the book at all, but is only dealing playfully with it as being a mere professional gesture which De Chardin had to make.

The Epilogue cannot be dismissed in this way. Without it, the rest of the book is only nonsense. The Epilogue is the Trojan Horse. It takes the previous parts of the book and reverses the meaning they seem to have. Yet this is so cleverly done that the race of materialists has hailed the book as an up-to-date gospel.

On page 26 Sir Julian makes the following strange statements: 'De Chardin has forced scientists to see the spiritual implications of their knowledge' and again: 'Nor can the materialistically-minded deny the importance of spiritual experiences and religious feeling.' I do not understand what meaning Sir Julian intends those remarks of his to possess. For without the Epilogue, which he repudiates, I cannot see any spiritual experience or religious feeling in the book.

I am tempted to take the Epilogue immediately and to endeavour to put its ideas before you, because after that the book itself would have some sense. But this would spoil the purpose of presenting De Chardin's work in the manner he stipulates and as it is being seen by the naturalistic fraternity, and (with distress) by a great number of others, namely as a purely naturalistic explanation of the origin of man. It has been hailed as a supreme achievement, 'a landmark in modern thought,' 'A synthesis of evolutionary science and religious doctrine that has the lucidity and sweep of Aquinas' *Summa Theologica*'. What wonder then that so many of us common people are dazed, dismayed and impressed!

So now I approach the book from the angle prescribed by De Chardin; that is without the Epilogue and as a scientific account of the phenomenon of man.

The book breaks radically away from the traditional account of the purpose of life, including that of man, on this earth. The author shows no creative acts or steps in the emerging of the different forms of life. All is ruthlessly evolutionary. He goes so far as to attribute to matter and to each atom of it a psychic quality, a sort of consciousness of life (he even uses the word 'soul') which has always contained in itself a plan towards which it would work, leading it to combine with other particles and ascend the long ladder of evolution, always striving towards higher forms; vegetable, animal, intellectual, being steps in the process.

Hearing him talking thus we are inclined to knock him off with the word 'pantheism'. But De Chardin was a trained theologian and he denies specifically that he is a pantheist. So even without the Epilogue we must exempt him from that imputation.

The 'mind' of each of those particles has been getting a bigger and bigger grip on itself as the years went by, and as a consequence was producing more and more complicated forms. To those who cannot see how such a process could accomplish itself at all, the overwhelming figure of five hundred million years is exhibited. The inference is that nothing is impossible in that length of time. Every scientist seems to be hypnotised by this idea of the Might and Bigness. Apparently the 'Passage of Time' is endowed with omnipotence and omniscience. Incidentally it follows that man has no real importance because he is so infinitely small in comparison with the hundred billions of boiling globes of gas which we call



the stars, and with the corresponding billions of years. Of course this sounds impressive to the unthinking. But reduced to simple shape it would prove that a man is inferior to an elephant. The position is the reverse – and to the drastic extent declared by Pascal, i.e. that all those billions of stars are less than a single human thought.

So those intelligent, plan-filled particles steadily improved themselves. They entered into such fruitful alliances with others that they organised into advanced structures. Then to use De Chardin's own phrase, there was nothing to prevent them from going further. He has a chapter entitled: 'The Advent of Life'. Which gives us the 'low down' on what was taking place. After ages and ages, and pages of Gilbertianese, life was born on earth. God, we say created the world with a word. There are many, many words, confident and intuitive (his own words) in De Chardin's genesis of that first living cell, but nothing that the mind can recognise as an adequate explanation, though one sees such words as 'evidence' and 'proof' scattered about.

But the upshot of it all was that something which we in our foolishness would be found regarding as a naturally impossible step – the transition from inanimate or inert matter to living substance – accomplished itself with less trouble than it took aeroplanes to beat the supersonic barrier! So that it is impossible for him to head the next chapter 'The Expansion of Life'.

Someone will protest that I am turning things into a farce. I protest back that I am not. The farce is already there, dressed up in science like a skeleton in a suit of armour. I am only opening up the armour to let you see for yourself.

Of course that must have been a real encouragement to the psychism of those particles and of the living forms which had been evolved. The moment a primitive life was at large on the earth, there is no trouble about its multiplying itself. With the experience gained and the gathering momentum of self-improvement, there was no holding back cellular life. That psychic quality had now earned its real chance and was getting well into its stride. It had little or no trouble – of course with the help of the Passage of Time – in promoting itself with vegetable life, and then into animal life and into that allegedly special form of the latter known as the primates (apes).

Now we are on the eve of things! For, says De Chardin 'this instrument (the anthropoid ape) was so remarkable supple and rich' that the next inevitable step had to have prodigious consequences, so much so that any of those previous mutations was as nothing compared with what was to come. Let that step be told in his own rendering which surely could not be improved upon:

By the end of the Tertiary era the psychical temperature in the cellular world had been rising for more than five hundred million years: From branch to branch, from layer to layer, we have seen how nervous systems followed *pari passu* the process of increased complication and concentration. Finally, with the primates an instrument was fashioned so remarkably supple and rich that the step immediately following could not take place without the whole animal psychism being as it were recast and consolidated on itself.

Now this movement did not stop, for there was nothing in the structure of the organism to prevent

it advancing. When the anthropoid, so to speak, had been brought 'mentally' to the boil, some further calories were added. Or, when the anthropoid had almost reached the summit of the cone, a final effort took place along the axis. No more was needed for the whole inner equilibrium to be upset. What was previously only a centred surface became a centre. By a tiny 'tangential' increase, the 'radial' was turned back on itself and, so to speak, took an infinite leap forward. Outwardly, almost nothing in the organism had changed. But in depth a great revolution had taken place: consciousness was now leaping and boiling in a space of super-sensory relationships and representations; and simultaneously consciousness was capable of perceiving itself in the concentrated simplicity of its faculties. All this happened for the first time.

It is difficult to comment on this. I suppose for colossal bluff nothing like it has ever been seriously put down on paper. The ordinary run of mortal, uneducated in scientific phraseology, could hardly fail to be awed by this photographic description, all the more so as it has received such a good press. And yet, what does it all amount to? Reduced to honesty, it means exactly nothing except a welter of words. I venture to give the gist of some phrases. Listen:

Boiling point was reached in the anthropoid, and a dose of extra calories was added in; the axis exerted itself convulsively and upset the previous equilibrium. (But may I interpret that this was doubtful equilibrium with all that fierce evolution and its drastic refashionings going on.) The central surface becomes a

centre. The radial turns back on itself and, so to speak, takes an infinite leap forward. Consciousness is now bubbling and effervescing in a space of super-sensory relationships and representations. Man comes silently into the world.

But why should I be recapitulating what the author has already said so much more effectively – and according to certain ecstatic reviewers, ‘in words of vision, greatness and lucidity’!

Lest any of the commonality might wonder if that startling conglomeration of technical phrases stands for some sort of recognised scientific process, I explain that such is not the case. Although it is depicted as if he had been witnessing it through a microscope, that process is only in De Chardin’s mind. The fact that it is boiling over with scientific vapour does not make it more substantial. The whole operation is just plain fantasy. The anthropoid may have been transformed into man, but certainly this was not effected in the manner prescribed.

Now an important point arises: Why had it to be the ape in whom all these evolutionary convulsions took place? The author tells us in a way which one might call determined and direct. Arguments are made bend to his purpose. Here is his explanation:

It all derived from the fact that the ape was operating, to a large extent in any case, on two legs and more or less using the front ones as arms. This meant that he had not to snap at his prey like so many other animals had, and, therefore, that his jaw muscles were not so aggressively developed. This in turn left his skull free to expand and of course this facilitated brain evolution, which was essential if that future being was to think!

This leaves one breathless. Reason rebels:



- a. How could a little thing like muscles on the brain hold back an evolution which the author has already explained 'had to take place; nothing could stop it'? Remember too that there were five hundred millions of years, and more if necessary, for the process.
- b. Not everyone will be satisfied with that explanation as to why the ape was the mark for man rather than, say, the dog which would strike one as more intelligent and humanlike in its ways, and certainly more willing than the ape to consort with man.
- c. The suggestion that the snapping of prey develops inordinately great jaw muscles sounds plausible until one reflects on it. How much snapping at prey does a biggish animal do? Not so much – a few times a day at most, certainly not enough to produce those monstrous fettering muscles. The greater use of the jaws would lie in the biting off and masticating of pieces. And in this occupation the ape would have to indulge just as much as the other four-legged animals.

De Chardin has some further remarks on the importance of this lessened muscularity of the ape's face. He points out that the ape's eyes in its diminished face (I have just argued that it should not have diminished) proceeded to converge: and that having one's two eyes pointing in the same direction is an aid to reflection: which is no doubt true, although many a man with a bad squint has been able to reflect effectively!

But why should the eyes proceed to look forward? Surely it is justified reasoning that if pressure behind a swivelled object is lessened, the object would tend to swing in that direction? Therefore the eyes should turn backwards and not forward as the result of the shrinking of the jaw muscles.

But all the foregoing seems to me to be an impossible straining of the argument. Why should an accidental circumstance, i.e. the muscles, be of any real consequence? According to De Chardin's theme, those physical particles – having achieved life and then higher living, then going on consciously to their superior destiny of becoming man – would work out a way which would not be dependent on mere diet and feeding habits. The process of evolution which can transform the primitive 'stuff of the universe' into man would hardly be stymied by a matter of jaw muscles hundreds of millions of years ahead. A course would be steered which would by-pass such a difficulty.

No doubt the author's reply to this would be that it did – through the ape's getting on its hind legs so as to get rid of the jaw muscles! But why then did not all the other animals do the same? The answer supplied by the book to this is that each particle had its own particular goal. The 'tiger-souled' particle could not avoid becoming a tiger, and no doubt particles with inferior souls would have to go onto their own less distinguished destiny. This is on page 150 for you to read.

But this does not seem to me to be reasonable except those particles were subject to a law outside themselves which was ordaining the progress. Otherwise the primordial atom having in itself the potency to go on to manhood, would impart the same power to all its produce. Why should some be frustrated along the way and develop the soul only of a tiger or a stone? It would seem logical that all that matter should possess the capacity to be transformed into men in the end. Why, too, should the capacity have restricted itself to a very few specimens of apes who did become man? For De Chardin says there were only a few, who then peopled

the world by human generation. Why should not all apes go on to becoming man? Why is the process not in operation today?

However, the main thing is that man had to come silently and softly into the world.

On page 137 the heading appears: 'The Evidence.' This is the attitude of the book. It assumes the tone of supplying proof of everything. For instance, after that half-stage of crazy assumption about the passing of the ape over the threshold into manhood, the author is found talking as if it had been demonstrated. He is all the time indulging in phrases like: 'We have shown' and 'as we have seen,' etc. Assume a thing and hereafter treat it as if it were a historical fact or an accepted formula.

Take the second half of page 195 and the first half of page 196 and see how scientific one can be: 'if it is really so'; 'may serve to shed light'; 'surely suggest the idea'; 'it might seem'; 'if this is so'; 'may have had its equivalent'; 'doubtless'; 'perhaps'.

The phraseology is all part of what is supposed to be a presentation of evidence.

But there is proof of a sort offered. It is two old friends, paraded triumphantly once again, but this time alas without their old stable companion, the Piltdown skull, which has come to misadventure. While De Chardin is silent on Piltdown Anthropus, Huxley faces up to it like a man and turns it into a joke. But it was no joke before it was discovered to be a fraud. It did duty for a long time, showing how gullible experts can be.

De Chardin discusses the two survivors. We presume he makes the best of it. But one would tremble to think of Pithecanthropus and Sinanthropus in the witness box exposed to the deadliness of, say, Perry Mason.

First, *Pithecanthropus*. De Chardin admits that it is not supported by any evidence that the skull belonged to a tool-making animal (which is one of the definitions of man). But he is able to explain the reason. The skull must have been carried away from the tools by water! I ask if ever such a gratuitous assumption as that has been so solemnly made? Secondly, if the skull is convincing proof by itself, why seek to explain away the absence of the tools as if these were necessary? Thirdly, if the tools are a necessary part of the proof, then their absence destroys the value of the skull. This forms a dilemma for De Chardin because he believes he has another case where there are tools.

This is the *Sinanthropus*. The skull was found in a cave littered with stone implements mixed with charred bones! The ape in his lair surrounded by the evidence that he had become a man! But now watch a perfectly priceless juggling of ideas. De Chardin admits that Mr Boule, his old master and a scientist of repute, disagrees and holds that the cave indeed belonged to a man, but that the skull was that of an animal which the man had used for food!

This is a radical difference of opinion, invalidating the skull to that extent; we have one expert against another. But this gives De Chardin no trouble. He declares that so long as no remains are found of that hypothetical man it must be held as proved that *Sinanthropus* was the real article, the tool-making animal, the missing link. I have to say that this strikes me as verging very close on an insane statement. Two items are found in juxtaposition after many millions of years full of the heavings of nature – and until disapproved – we must consider them to have always belonged to each other! You are found near the corpse and you are guilty until you prove absolutely that you did not do it. This reverses the usual rule of evidence.



And what about the action of the water which took away the skull from the evidence in the case of *Pithecanthropus*? In the case of *Sinanthropus*, might we not just as legitimately argue that the flood action swept the skull and bones into the cave? Or that the pirate, Morgan put them there!

The presentation of that sort of evidence and in that sort of way gives us the feeling of being in a cave in Wonderland along with Alice. But then in the end De Chardin seems to throw those skulls away. For on page 193 and 197 he states that they are not the skulls of men such as we are: 'they represented strange creatures which have long ago vanished from the earth, and about which science could hesitate, wondering what sort of creature it was dealing with.' He goes on to insist that at least one further stage would have to be passed through on the way to full manhood. This must be a shock to those who had previously been led to believe – and that by De Chardin's own argument – that *Pithecanthropus* and *Sinanthropus* were the real things. In those circumstances why call them 'anthropus' which means 'man'? And would the full transformation have to be attended by the same sort of frantic gyrations as characterised that first silent entry?

The foregoing is typical of the book. And here I urge a few general principles. Science is supposed to be an exact thing. You proceed by proof and deductions and these must be reasonable. In our enthusiasm to open up new frontiers of knowledge we must make sure that our science does not suddenly become a fairy tale. De Chardin has gone closer to making it a pure fairy tale than any other writer ever has – with his psychic, self-animated particles which steer themselves along through the ages towards deliberately calculated objectives, some towards

becoming a man; others animals; others into minor forms of life; and others not getting that far.

That is not science, nor could we even call it a scientific fringe such as the space travel fiction is. It is a pure exercise of imagination. It reminds me of those stories which credit a human personality to animals. Paul Gallico has gone one better than that. He animates with personality a bubble which has inflated itself in a kitchen sink, then being carried down to a river and to the sea. Its adventures make a charming tale. But what Gallico did as fiction De Chardin is supplying to us as fact. To every primordial atom (page 300) is attributed a psyche which appears to be the equivalent of Gallico's creation. But the bubble burst, whereas the primordial atom went on to become man on a still unfinished course.

The book affects to have been written for scientists, so that surprise is expressed when it becomes a popular hit. But I do not remember any purely scientific work being written in that style. A scientist who produced such a work solely for his own brethren would be laughed at by them. Apart from its arguments, the phraseology would be inadmissible.

Of course the book had also to view a popular consumption, which sets the scientific luxuriance of its language in an interesting light. It was written to 'impress the natives'. No common word is used where a technical or coined one could be introduced; nor an easy one where a difficult one could be had. It is not to be thought that these are necessary (as such words sometimes are) for the establishing of his meaning. The opposite is the case. It is only on the measure that one breaks down the ultra-scientific expressions and eliminates the pure verbosity that one gets to grips with the meaning. To

cap things he has recourse to the invention of words of his own. Personally I can only see in all this the play of charlatanry.

It is understandable that such work would impress the natives, but it is incredible that it should impress the scientists, as apparently it has done. But perhaps the explanation is that they understand that even a scientist has to have recourse to little devices to get home with the populace.

The London *Times* reviewer talks of the 'poetry' which wells up behind the logic of this remarkable man's mind? What is this poetry? Presumably it lies in mellifluous phrases such as the following which might have been taken right out of Gilbert and Sullivan:

'The planetary convergence of all elemental terrestrial reflections' (page 307); 'the rationalised recoil of all the forces of research' (page 306); 'the physical impossibility of the cosmic revolution' (page 304); 'defines experimentally as the scientific effect of organised complexity' (page 301); 'clearly recognisable as the individual orthogenesis' (page 138); 'the confined and functional explosion of the internal combustion engine' (page 141); 'the decantation and automatic patterning of associated ideas' (page 300). Phrases such as the foregoing jump out at you all the time. It is the style of the book.

If the scientific fraternity are really impressed by this book, it shows how easily they are convinced when they want to be convinced, for there is not a shred of proof and hardly a legitimate argument, in the length of it. It is written to bolster up at any price the theory of whole-hog evolution, i.e. particle to man without any supernatural intervention from start to finish. And where, might we ask, did the original particle come from?

In it, or rather in the degree of approbation it has received, we are looking at the working out of an old law: 'Those who will not acknowledge the miraculous will soon be found taking up with the absurd.' This book (deprived, as I have said, of the Epilogue) is absurd to such a degree as to remind one of the comment of an honest old agnostic on Ernest Renan's unbelieving *Life of Jesus*. He found its reasoning so perverse and insufficient that he set it down with the explosive comment: 'The opposite must be true.' That I have to confess, is the reaction produced in me by De Chardin's treatment of his subject.

The lesson I draw is that Sir Julian Huxley, and those others who think with him, having closed their minds to the possibility of anything but a natural theory of man, are found going down on their knees before charlatany and nonsense.

And this brings me to the Epilogue, which may be the key to the book, the explanation of what Huxley is referring to when he speaks of De Chardin's effort to reconcile religion with all-out evolution. Because in the remainder of the book there is no entry of the supernatural.

Therefore *The Phenomenon of Man* is a Dr Jekyll and Mr Hyde, two quite different affairs, but directed by the one personality; one emerging out of the other. I think that the purpose of the book is that very one of reconciling the supernatural elements of Christianity with the facts and implications of evolution.

Perhaps I am unduly simple in thinking that De Chardin's idea may be the following: God's plan was that the Incarnation would reconcile and exalt to himself all nature. This was to be accomplished in the first place through man, who is the microcosm, that is containing in himself the vegetable and animal orders and 'all the stuff



of the universe'. United with that body is a soul which has capacity for God. That operation of uniting man and the universe with God is fulfilled through Jesus Christ. He takes hold of man and lifts him up to God. As he said, the universe was for Christ, and Christ for God. Looking at things from this angle, every step forward from the creation of the universe amounts to that Christogenesis (to which Huxley refers incredulously); not in the sense that it was going to bring forth Christ but that it was a step on towards him.

Nowadays everyone agrees that that in this forward march evolution played a great part. The Huxley school believe it to have been a total part, the supernatural being excluded. The different stages of life emerged naturally, terminating in man!

The Christian believes that inside the different grades of existence, evolution operated freely, but that to carry lifeless matter over into the order of vegetable life a creative act was required, proceeding from outside, that is from God. And a similar act would be necessary at the stage of producing animal life, and again in the creation of man.

To the casual reader De Chardin would appear to be suppressing those successive supernatural creative acts and to be evolving right through from the most primitive material to man. So thinking, the conventional Christians would be upset by this treatment. As they would see it, he has made a common front with the purely evolutionary school which repudiates Christian belief. And it has to be admitted that his book without the Epilogue unquestionably bears that mark, so that Huxley hails him as one of the fraternity.

But that is where Huxley and Co. may be wrong. De Chardin has to some extent successfully introduced the

Trojan Horse of Christianity into the camp. It is painted all over with their symbols and it neighs in their own dialect. And there they are gathered around it in admiration! So that, without meaning it, he has perpetrated as elaborate a hoax on the scientists as the Piltdown skull.

De Chardin takes the primary particles of nature and he invests them with what he calls psychism, life, mind, consciousness. Of course, put in that way, this is just absurd. But it is a point of view held by many of the scientists. These extraordinary particles enjoy a transcendent faculty, i.e. of aiming at a higher state, and planning and working to attain it. This seems to me to be claiming more for those particles than is possessed by man at his best, because we, apart from revelation, have no idea of what we are supposed to achieve. For instance, a great number of 'thinkers' believe that Communism is the higher state to which we are struggling. Yet as a philosophy, Communism is degrading to the dignity of man and reduces him to the role of mere particle out of which the evolutionists have evolved him.

So let us return to that Christian idea of the universe being worked on by God, ever upwards through the different stages of life on to man and Christ. That psychism or mind which De Chardin credits to the particles as they evolve and ascend in order, is what we in our simpler way would call the hand of God resting on them. His is the mind, the life, the consciousness, the power: and the particles possess nothing of those things other than what he imparts to them.

But the point is that De Chardin does not seem to intend to depart from the ordinary Christian idea of successive creative interventions. God takes stuff which has evolved and imparts to it a new condition. And he

does this several times, including the creation of man and then again at the Incarnation.

But there is a mysterious page which shakes me. It is page 186. There De Chardin wonders what our first parents looked like. And he also asks how many other anthropoids crossed over the animal border. This seems to be a break with the essential Christian idea of a single original pair, and indeed a single original person, Adam.

De Chardin's veiled treatment of the foregoing is what Huxley refers to as the emergent divinity, the Christogenesis. Huxley understood it as being a production of Christ and divinity. But De Chardin asserts that there is no question of a Christogenesis in that wrong sense of the evolution bringing forth Christ as a higher stage in its progress. He insists that God (Omega) was already in existence before the first primordial atom (page 291/2) but he intervenes in a special way when those secondary causes come to the end of their tether, i.e. when it would be a question of going on to a higher order of existence. God, it is true, may then take as the basis something already existing, but it is he who has to confer the higher state by an act superseding the mere evolution. Huxley and Co. say no; that the mass itself successively produced the higher stages. De Chardin believes that God throughout from the beginning used the evolving mass and uplifted it at each new state. To the reader this may not be as plain as the proverbial pikestaff, because De Chardin is evolving his Trojan Horse. But it could be nevertheless that all his juggling with words has nothing else in view.

All the convulsions of that ape, the calories, the axis, the recoiling and then advancing radial, the surfaced centre, the tangential increase, the mental boiling and the leaping consciousness – all the hodgepodge

of meaningless (in this connection) terms and veneer of science is just meant to be a super-impressionistic rendering of a creative intervention by God. If pure evolution was proceeding over many millions of years, there would be no paroxysms of this kind; all would be moving so gradually that the new would arise out of the old imperceptibly. Let us remark that there is no need to be parsimonious about years when there are so many of them to spare. De Chardin says a few thousand million years. Gilbert Ryle says eight billion years. Fred Hoyle says the universe was always there.

Unfortunately many people are being worried by the book. It is too artful, or clever if you like. It has made itself too much like a whole-hog materialistic evolutionary work, explaining everything without God, and fitting into the dominant scientific concept that 'there has to be a natural explanation of man,' as Hoyle insists. But, as an aside, why? And why is Hoyle, who is an eminent astronomer, pontificating about biology?

De Chardin's book looks like unbelief, and it may be the opposite. With the one exception which I have mentioned, he may be taking no particular liberties with our commonly accepted Catholic doctrine. But he is being greeted as hail-fellow-well-met by all the unbelieving scientists, and many of the ordinary believers are a little dismayed.

So I think this corrective is needed.

But of course there is the possibility that it may not be a corrective; my explanation may be wrong and De Chardin may really be a pure Huxleyite. In that case we would be driven back to the other alternative, namely that this book is only dangerous nonsense.