

Ceci me semble une conférence de 1936 ou 1937.

Elle est proche du Cosmos (1936) et des autres ~~liens~~  
conférences sur l'évolution.

## The Problem of evolution in Philosophy and Science

Scholastic philosophers and theologians are wont to believe that the very essence of evolutionism consists in an effort to explain this universe without having recourse to the Creator; to do away with the idea of creation as much as possible, if not entirely. That is undoubtedly true of a certain number of evolutionists. But we must never judge a theory by the various ways in which we might abuse of it.

We might say that there are two fundamentally different manners in which scholastics have tried to honour the creator. The one consists in trying to concede as little as possible to the creature. This is the idea at the bottom of creationism. Creationism would have us believe that a special intervention of God is necessary for the establishment of a new natural species, exactly as in the case of angelic species, and deny the scientist any right to try and derive one from the other. At the other extreme we find those scolastics, such as S. Thomas, who will concede to the creature as much as possible, not because they wish to eliminate as much as possible the intervention of the creator, but on the contrary, because the creative power of God is most profoundly at work where secondary causes are most "causal". The more a creature is capable of acting of its own accord, the more it manifests the power of its ultimate cause, for even this causality is from God. Considered from the viewpoint of the creatures, God is more profoundly cause of our free acts - and no activity is more our own - than of any other reality in us. The more a creature is cause, the more God himself is cause: for he is cause of the causality in the creature.

*Gardail  
St. Thomas*

*for he is cause of the  
causality in the creature.*

Therefore, if we reject the fundamental idea of creationism, it <sup>because, of all orthodox ~~doctrines concerning this problem~~ ~~forms of evolutionism~~</sup> creationism is really the least creative: no form of evolutionism deprives God of more power than the doctrine which would deny his effects to be causes. We reject creationism because it is not sufficiently creationist.

Before passing on to a justification of this viewpoint, I would like to show the profound distinction between the scientific problem of evolution, and the philosophical problem of evolution.

Quite generally, philosophers as well as most scientists assume the right to confuse their respective viewpoints, and the conflict provoked by the problem of evolution is a most striking example of this confusion.

The battle is really based on a methodological error. Philosophy and science start from two fundamentally distinct points of view. The terms used are profoundly equivocal. The very term evolution has an entirely different meaning in experimental biology and in philosophy of nature, as we shall see later. *Ed. life, intelligence; plant etc --*

All science, whether it be philosophical or experimental, tries to explain the complex in terms of the simple. This is a fundamental principle of all science. But it is important that we agree upon the meaning of the term "simple". The nature of the simplicity to which we must reduce all phenomena may differentiate the very nature of the sciences.

Now it is very easy to show that what we call "simple" in experimental science, is inversely proportional to what we call simple in philosophy. In science, a stone is much more simple than a living cell. The propelling mechanism of a car

is infinitely more simple than whatever enters into the leap of a panther bounding upon its prey. And of all beings studied by experimental science, man is undoubtedly the most complex.

In Philosophy, it is just the contrary. Man, who, in experimental science is the most complexe of all beings subject to experiment, is in philosophy of nature the most simple of all beings entering into the composition of our world of space and time. The animal is more simple than the plant. A being is simple according to the perfection of its form. The result of this principle is most astonishing. A stone becomes infinitely more complexe than thought, and its very ontological complexity is the ultimate reason why a stone does not think. And when ontological simplicity <sup>is</sup> ~~becomes~~ absolute, it is thought thinking itself: it is God. In metaphysics, the ultimate cause by which we must explain all things, is pure act, absolute simplicity. In metaphysics, God occupies a position analogous to that <sup>invisibly</sup> held by the quantum in contemporary physics.

~~Now let us see what happens when we apply this distinction to the complexity of existence~~

In other words, experimental simplicity is inversely proportional to ontological simplicity. The philosopher who looks upon the work of the scientist will say that the scientist is explaining the superior in terms of the inferior, whereas in philosophy we follow an opposite course. (One might object that Bohr, for instance, has used a macroscopic image in order to explain the structure of the atom which he compared to a planetary system. But the explanation did not consist in the comparison, nor in the image, but in the ~~construction~~ construction of an image derived from the elements of the atom.

The explanation lay in the derivation of the minuscular planetary system from the elements, and not vice versa.

Let us now apply this principle to the problem of evolution. It is clear that if there is such a thing as an experimental study of man ( a human biology, an experimental psychology) we will have to consider him in the perspective of what is experimentally more simple than ~~man~~ man, that is if we wish profoundly to understand human composition and activity. The aim is not to identify the complexe and the simple, but to explain the former by the latter. We must endeavour to reconstruct man from what is experimentally basic and elementary. Hence nothing could be more natural than the scientist's attempt to derive man from the animal, and the latter from the plant and so on. He will try to explain how the hierarchy of natural species has established itself by increasing complexity and organisation. If he cannot do this, then he ~~cannot explain~~ does not explain. ~~And that is what this explanation will not be ontological~~ When the scientist says that the animal kingdom evolved from the plant, he does not mean that the plant is the ontological cause of the animal. We cannot expect the scientist to get to the ground of the ontological structure of things. We cannot expect the experimental scientist to prove the immortality of the soul, or the physicist to prove the existence of God. These proofs are strictly philosophical. Therefore, it is the scientist who denies the possibility of other viewpoints than his own, the scientist who believes that his own particular viewpoint is the only and exhaustive one, that falls under the category of evolutionists we condemn. Hence we do not question his scientific facts and scientific theories, but

but his methodology, not in so far as it is scientific, but in so far as it excludes the possibility of other viewpoints. This methodological error does not necessarily affect the intrinsic value of the theory. *So far as the theory itself is concerned* It really does not matter what he thinks beyond his own field. The architect cares little about the architectural opinions of the mason executing his work so long as he follows the plans. It matters little what the acoustician thinks about a Bach Fugue, so long as he knows how to tune an organ. If certain scientists today believe, but I am sure they are few, that there are no problems other than those of experimental science, and that this branch of knowledge gives sufficient knowledge of reality, it would be vain to try and convince them they are wrong in their exclusion. *However* If this attitude makes them happy I cannot see what could be done about it, nor that it matters.

They are comparable to the people who ~~cannot~~ dislike cheese and olives ~~cannot~~ or Mozart; *or to any animal who can do very well without philosophy, as an animal.*

When speaking of evolution in Philosophy, we must start from the fundamental principle that intelligence is the very raison d'être of all possible creatures. God is the end of all creatures. He did not create in order to manifest his glory unto Himself. He has no need of this. This manifestation calls for an appreciation by the creature itself. Now this can only be realised by a creature capable of knowing God. The intelligent creature alone is capable of an explicit return to its creative principle; so that a being which is not endowed with intelligence, cannot exist for its own sake; whereby it automatically becomes a function of another being, capable of knowing God. As S. Thomas Says (II II ii 3): "the created rational nature alone is immediately subordinate to God, since ~~other creatures~~

other creatures do not attain to the universal, but only to something particular, while they partake of the divine goodness either in being only, as inanimate things, or also in living or knowing, as plants and animals; whereas the rational ~~creatures~~ nature, in as much as it apprehends the universal notion of good and being, is immediately related to the universal principle of being."

From this we may immediately conclude that all existing things in this universe of space and time are essentially ~~functions~~ in function of mind. If we exclude mind from our world, we may not even call it a universe proper. A world which remains obscure to itself has no unity. As S.Thomas says: an essential part of the universe is not essential in so far as it is a part of the universe, but in as much as it is itself a universe: in as much as this part is in a certain manner all the other parts. An essential part must be in vital communication with the whole. And this<sup>^</sup> what happens through mind and knowledge: for the soul, says S.Thomas, <sup>^</sup>in a certain manner all things: anima est quodammodo omnia. "Secundum hunc modum possibile est ut in una re totius universi perfectio existat." In this manner it is possible that the perfection of the entire universe exist in one being. "Nam unaquaeque substantia intellectualis est quodammodo omnia, in quantum totius entis comprehensiva est suo intellectu." de Ver.II2

That an intellect knows somehow all things is a rather astonishing statement. We are intelligent beings. This does not prevent us from observing that we barely have enough intelligence to know that we know nothing. For there is no doubt that we are so ignorant that it is impossible for us to know just how ignorant we are. If we did, if we knew the depth of our ignorance, ~~if~~ if we knew exactly what we do not know,

we would know what we do not know, and knowing nothing we would know all. We would be all-knowing, omniscient, as God. In other words, God alone knows the profundity of our ignorance, because he alone knows all.

But to know that ~~wne~~ knows nothing is nevertheless a manner of knowing all things. When I say that I know nothing, I mean that I am ignorant of everything. But how could I know this if I did not somehow know everything? It is impossible to think "nothing" without somehow thinking "everything". This everything is very abstract, and therein lies the imperfection of our knowledge. But it is the privilege of all intelligence to be able to say "nothing", "impossible". We know that nothing, i.e. the impossible is opposed to being: a thing which I could not think if all beings were not fundamentally accessible to mind. My knowledge of everything is most confused and abstract, but is nevertheless in its own way knowledge of being which implies all being.

~~if we can conceive of no other cosmic intelligence but~~

Now, we can conceive of no other cosmic intelligence but that of man, for an embodied ~~mind~~ intellect, no manner what shape it may take, will constitute a rational animal: and this is what we mean by man. This means that our universe of space and time is essentially related to man: and that all beings inferior to man, are essentially ~~function~~ in function of man: ~~in other words~~, our universe makes no sense outside the perspective of humanity.

In other words: an ~~intelligent~~ intellect contemplating our universe at a time when it contained not only no human beings, but no life whatsoever, this intellect could nevertheless infallibly predict the advent of man, otherwise, all things existing before the advent of man would be in themselves contradictory.



Now if this universe is ~~from the~~ originally and essentially ordained to mankind, why does the mind not make its appearance from the very beginning? ~~Why is it that the mind does not appear from the very beginning?~~ Why does it enter this universe only at a given time? Why are human souls not given from the very beginning?

What is a soul? Following Aristotle, S. Thomas defines it the act of ~~an~~ a physical organised body. What does this organisation presuppose? It means disposition of matter. Hence, if there is no life in this universe, it means that matter is originally insufficiently organised. "...if a form, says S. Thomas, be not suddenly impressed upon its subject, it is either because that subject is not disposed, or, because the agent needs time to dispose the subject. Hence we see that immediately the matter is disposed by a preceding alteration, the substantial form accrues to the matter.... For the reason why a natural agent cannot suddenly dispose matter is that in the matter there is a resistant which has some disproportion with the power of the agent..." (I II 113 7c)

Evolution will <sup>be</sup> nothing but the progressive organisation of matter in view of the reception of the human soul. For there is no doubt that the human must be immediately created by God, since it is spiritual and simple, and therefore cannot be extracted from a given subject such as matter.

But whence comes the non-spiritual life in the universe such as that of plants and animals? You have all heard of prime matter. Matter contains potentially all the possible natural forms. These forms of life were given in the potentiality of matter from the very beginning. Hence they are no longer to be created. They may be released by a created cause. An inorganic being is not a living being, but in the potency

of its prime matter it contains forms which when released will be souls of living beings. And a sufficient cause may thus ~~extract~~ extract, educe life from non-living beings. Infra-spiritual life in this world does not come from without, but from within the world, by way of organisation.

But the inorganic will not be able to deliver itself of the potential life it contains. It cannot generate life. For generation is "origo viventis a vivente in similitudinem naturae". In generation proper, the effect is always similar to the cause, and no cause, as principal cause can produce an effect superior to itself. Hence evolution cannot be ontologically explained by way of univocal generation.

Must we therefrom conclude that evolution will henceforth be impossible? This will depend upon our concept of nature. The concept of nature of contemporary scholastics is profoundly different from that of medieval scholastics. Modern authors ~~have~~ generally hold an extremely naturalistic conception of nature. In their opinion nature as nature must explain itself. Now in nature, there is no spiritual agent which could realise ~~evolution~~ evolution, there is no sufficient cause. Therefore, the suscitation of new life in this world cannot be explained but by a direct intervention of the creator.

S. Thomas thought otherwise. In the Summa Contre Gentis, he established that the desire of prime matter, is ultimately a desire of the human soul: ultimus generationis totius gradus est anima humana, et in hanc tendit materia sicut in ultimam formam. How can this tendency of matter be satiated? No agent acting of its own accord can produce a form superior to its own: nihil enim secundum propriam speciem agens intendit formam altiore sua forma. But the universe tends toward

the ultimate form which is the human intellect: intendit ultimam formam, quae est intellectus humanus; quae quidem est altior omni forma. This form is higher than any ~~any~~ natural form.

Now does S. Thomas conclude that the desire of prime matter cannot be ~~xxxxxxxxxx~~ answered, since within the limits of nature there exists no cause capable of realising the aspiration of matter? By no means. From the necessity of an ~~xxxxxxxx~~ ascendancy in nature, he immediately ~~xxxxxxxx~~ the necessity of a ~~xxxxxxxxxxxxxxxxxxxx~~ spiritual power driving our universe on to ever higher levels of life. And he does not specify the nature of this power. "Non differt/quantum ad praesens intentionem, utrum corpus coeleste moveatur a substantia intellectuali conjuncta quae sit anima ejus vel a substantia separata, et utrum....a Deo, vel nullum ~~immediate~~ immediate, sed mediantibus substantiis intellectualibus creatis.... dummodo habeatur quod motus coelestis est a substantia intellectuali." It does not matter presently whether this spiritual substance is as the soul of the universe, or whether it is a separate substance acting upon the universe from without; neither whether this substance is God acting immediately, or any number of created spiritual substances, so long as it is clear that nature is travailed by an intellectual substance.

Now this immediately removes all possible philosophical objections against evolution based on the principle of sufficient cause. If evolution requires a superior cause, than this cause exists. But it must also be made clear that this ontological causality has nothing to do in the field of experimental science. We cannot expect the scientist even to move the question? He must explain evolution by genes, and not by spiritual powers, which can make no sense in experimental

science.

It is clear then, that from the philosophical viewpoint, all work of nature is ultimately that of an intellectual substance: "quodlibet opus naturae est opus substantiae intelligentis." (CGIII24) This is why we may say that nature is ingenious, that nature knows, and so on. Not because a natural being has intellectual knowledge, but because when the being itself has none, there is nevertheless intellectual knowledge in play. Mind is at work in the growth of a tree, or the rising of the sun. And this very intelligence is really bringing nature closer and closer to itself, it is drawing nature to its own level, by increasing the interiority of natural beings, by enriching life. We will see later how this interiorisation is realised in the hierarchy of natural species.

There is one more classic objection against evolution that I would like to answer before describing the process from more particular angles. It is said that natural forms are indivisible. For the form is what constitutes a thing what it is. Therefore no form can be transformed into another. - This is quite true. Forms are indivisible. But I cannot see how this would affect the idea of evolution. If it did, it would mean that ~~xx~~ our concept of form is not aristotelian, but platonian. For in the process of generation, it is not the form which is transformed into another. Generation consists in the eduction of one being, not from the form of another, but from its potency. And S. Thomas who is often quoted to sustain this objection against evolution, answers literally: "In hoc videntur fuisse decepti quia attribuebant fieri proprie istis formis."

cum tamen fieri non sit nisi compositi, cujus etiam proprie est esse. Becoming is not in the form, but in the whole of the thing that becomes. Unde et fieri dicuntur formae non propria factione sed per factionem suppositorum, quae transmutantur transmutatione materiae, de potentia in actum.

Evolution may therefore be defined as the process of ever increasing organisation effectuated by the eduction of more and more perfect and heterogeneous natural beings from the potency of imperfect natural beings, not by way ~~of univocal generation~~ of univocal generation, but by equivocal generation rendered possible by the spiritual impulse exerted upon our universe, impulse which responds to the essential desire of prime matter to be delivered of the forms it potentially contains, and to be increasingly organised by way of alteration, ~~This process is not a~~ ~~hierarchy of~~ until in some superior animal matter has been sufficiently organised to call naturally for the creation of the soul, to which the whole of nature had been ordained.

Evolution may therefore be considered as an immense effort of nature, sustained by that spiritual driving power, to dispoose itself and to make its last appeal to the creator who responds to natures' desire, the appetitus materiae, by the creation of the human soul.

~~Before going on~~, I would like to make one more point which is perhaps the most delicate of them all. May we say that the human body is a product of ~~the~~ evolution? This question calls for a few distinctions. We may consider the human body from an experimental viewpoint, or from a philosophical point of view. If from the latter, I would distinguish again,

before answering the question. If by "production of the ~~human~~ human body" we mean the growing organisation of matter in view of man, i.e. generatio ut factio, then we must answer that the human body is prepared by way of evolution. However, ~~the question is whether the human body is constituted by the~~ ~~human body is constituted by the~~ absolutely speaking, since the soul is what constitutes the body human - where there is no human soul there is <sup>no</sup> human body: a corpse is not a human body - since the soul is what constitutes the body human, God alone can constitute the body human, for He alone can create the soul, formal cause of the body.

If by human body we mean what is experimentally observable, then I would say that, ~~in a certain manner~~ in a certain manner, it was given from the very beginning. Put a man on a scale, and let him die. A substantial transformation takes place. But this is not ~~indicated~~ registered by the scale. The pointer keeps indicating the same number. The scientist might follow a group of atoms from a pond ~~then~~ through a blade of grass, and from the grass into the cow, and from the cow into Mr. Zebedeus, where they finally lodge themselves ~~there~~ somewhere in the tip of his nose. This might have <sup>been</sup> done for all his atoms, for Mr Zebedeus, whether prime minister or beggar, is like bricks, cabbage, and dogs, made up of atoms. From this point of view, Mr Zebedeus is no more than a very complicated mess of atoms. I do not think that the passage of the atoms from the pond into the grass into the cow into Mr Zebedeus has affected their weight.

But this point of view is merely metrical. It does not go down to the ontological causes of Mr. Zebedeus.

I think that these precisions will do, at least to show that the problem of evolution is a very ~~complicated~~ intricate one. I have often been asked: "are you for or against evolution?" "If the questioner expects me to answer ~~yes or no~~ by a yes or a no, then would say: "whatever your opinion might be, it is certainly not mine." This question cannot be answered by a yes or a no, but by a treatise of philosophy. And by what I have hitherto said, I have merely tried to show that a treatise would be necessary to answer that question. I sincerely hope you are not looking for it in this lecture.

I would now like to suggest a few particular points of view from which we might consider cosmic evolution. We might define the process of evolution as an aspiration toward "intemporality", since it is a tendency toward the spiritual form of man, which, considered in itself, is above time. We might consider evolution as a tendency to overcome spatial diffusion, as an aspiration toward intellect and free will.

We ~~will~~<sup>might</sup> study evolution from these various viewpoints in the perspective of philosophy of science. In Philosophy of science we take into account what has been established both by philosophy and by science, and we try to weave it all into a harmonious whole.

In Lemaitre's theory of the expanding universe, ~~physics~~ physics reveals to us a world starting from an immense primitive atom, in which all the energy actually dispersed in the profusion of heavenly bodies was originally condensed. This atom exploded at the beginning of time, and our present universe is nothing but the fragments of this explosion which continue to fly away from one another. This theory might explain the recession of the spiral nebulae. ~~Then~~ On the microscopic

scale, the second law of thermodynamics, shows us an aging universe, a universe which is continually breaking down, and which will eventually be extinguished some time in the future. Energy is being irreversibly degraded en tending toward a state of thermodynamical equilibrium.

In the theory of mutations, biology also shows a universe advancing by continual and successive explosions. ~~Maxx~~ But, in opposition to the impoverishing dispersion of the physical world, life grows by increasing organisation. The flower constitutes a progress <sup>in</sup> of the bud.

Whereas the physical world is becoming more and more disorganised, the biologist has ~~observed that~~ observed that the organisation of life becomes more and more intense in the course of time. We might liken these two opposite movements to a chick which frees itself from the egg by bursting its snelle. The growing life of the chick might be ~~compared~~ ~~to~~ an image of the general biosphere, or life-sphere; wheras the bursting shell is an image of the beaking down physieal universe.

If we look upon these opposite phenomena from the viewpoint of philosophy of science, we might say that the impulse of life and its progress ~~is~~ are responsible for this breaking down of the physical world, that the urge of life is literally wearing it out.

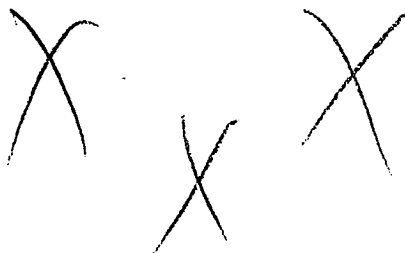
Tending toward a greater organisation, the ~~why~~ disorganisation of the physical world is but a debris of a universe absorbed in life. In this tightening organisation the biosphere is lifting itself more and more above the fragmentation of space, and above vanashing time. Absolutely speaking, it is life which in the effort to touch itself in



consciousness~~xxxxxxxxxxxx~~, that is, in a center of immaterial and spiritual density, disseminates space and time as the waters ~~of~~ dispersed by the prow of a ship.

Life advances against the diffusion of time, it is a triumph over the scattering of physical time, and oblivion. This is manifest in the increasing memory of animals. All knowledge supposes a certain degree of intemporality. In knowledge, ~~that past and the future are lifted above~~ there is not only a certain degree of independence ~~from time and space~~ ~~time~~ relative to time, but also to space. In so far as being is living it is above space. And a being capable of knowledge is above the diffusion and the separation of space in ~~as~~ as much as it is present to itself, and ~~in~~ as much as it is capable of assimilating its environment. Where space is dominant, things are separated from one another: one is totally outside the other: whereas knowledge is essentially compenetration.

In life, the universe which is expanding from the physical point of view, is bounding back upon itself, and constitutes in this contraction centres of increasing density, finally reaching man, in whose intellect the cosmos is present to itself. We might represent the universe as two extremes separated by space and time all they entail, tending to be united in consciousness, and in so doing, the world projects this whole hierarchy of natural species, each of them being a step toward this ~~xxxxxxxx~~ union.



I have just said that the biosphere is lifting itself more and more above time. This is not just a literary divagation, or a metaphore. If we arrange the plant species according to their rapprochement of the animal, and the animal species according to their rapprochement of man, we must say that the vital impulse which animates the cosmos from the very beginning is educing from the potentiality of matter forms emerge more and more above matter, essences which are more and more one, and ~~simplex~~ ontologically simple. Now existence is always proportionnal to the essence. Quantum inicuique inest de forma, tantum inest ei de virtute essendi. In other words, the duration of cosmic beings will be of increasing simplicity. Natural species will constitute a hierarchy of durations, just as it constitutes a hierarchy of essences. The animal will be less temporal than the plant.

This perspective is undoubtedly strange, since from the experimental point of view we measure the duration of plants animals and man with the same clock.

But precisely, the perspective of experimental science and that of philosophy are profoundly different. Physical time is to be defined by the way in which we measure it. Now the bases of physical measurement is homogeneity. Natural beings may be measured in this manner in as much as they have an element in common: corporeity. Now corporeity is characterised by homogeneity. This sufficiently explains ~~xxxxxxxxxxxx~~ the unity of physical time.

But in philosophy we must take into account the whole of natural beings: we must consider their heterogeneity which constitutes each individual in a determinate species.

Je voudrais vous présenter quelques réflexions de l'ordre de la vie des sciences  
sur le problème de l'évolution.

Deux aspects particuliers :

l'évolution dans la perspective de l'espace-temps  
de la nature

Conférence donnée à la  
Soc. Philog. de mil  
en 1936 ou 1937.  
M. de K. y a ajouté  
des notes de ~~son~~  
pour en faire une œuvre  
~~autonome~~

Je voudrais vous présenter dans cette  
conférence, quelques réflexions de l'ordre  
de la philosophie des sciences, sur le  
problème de l'évolution. Et je me  
limiterai à deux aspects particuliers que  
présente cette question parmi tant d'autres.  
Je voudrais regarder l'évolution dans  
la perspective de l'espace-temps, et dans  
la perspective de la nature.

Mais j'ai un mot à dire avant  
de passer de ma place à ce point  
de vue plus étendu.

- On croit que la Qie Thomiste s'oppose à toute idée d'évolution dans l'univers spatio-temporel - Cela tient à la transformation de la Qie de la nature non pas à la doctrine de S. Thomas.
- Cette transformation consiste à confondre le pt de v. ontolog. (phil'o de la nat.) avec le pt de v. expérimental des sc. dites exactes.
- Ex. ~~le~~ biologiste ~~et~~ la théorie évolutionniste - Objections de la Qie.
- p.2 - L'erreur de la philosophie consiste à vouloir expliquer la nature en fonction d'elle-même, comme doit faire le savant.
- p.3 - Déjà pour expliquer le mot dans le monde inorganique, il faut avoir recours à une cause active transcendante.
- p.3 - Doctrine de l'hylémorphisme = toutes les formes mat. poss. sont contenues dans la puissance de la matière, à l'exception de la form. spir. de l'he.
- La nature exige une ascendance. Toutes les natures infrahumaines sont ordonnées à l'he.
- p.4 - Il faut que le mot se termine à un esprit intracommuniqué; lié à la mat. à l'he.
- Point délicat : peut-on dire que le corps humain fut façonné par voie d'évolution ?
- p.5. Distinction : Philosophiquement parlant, le corps humain n'est humain que par sa forme spirituelle. En ce sens, il est impossible que le corps humain soit produit par évolution.
- Mais si pour produire un corps humain, nous entendons tout le travail préparatoire, par voie d'altérations et de dispositions, il est entendu qu'on peut dire que l'évolution le façonne.
- Étudions l'évolution de notre univers dans la perspective de l'espace temps
- l'évolution amène des temps de transition jusqu'à arriver à l'he qui, dans sa spiritualité, n'est plus dans le temps.

## d'Evolution en Biologie Philosophique

Si on croit généralement que la phil. thomiste s'oppose à toute idée d'évolution dans l'univers spatio-temporel. Il est vrai que le thomisme, tel qu'il a été transformé depuis nombre d'années, ne laisse aucune place à une ascendance dans la nature. Mais cela tient à ~~sa~~ transformation <sup>de la phil. de la nature</sup>, et non pas au thomisme à la doctrine du chef de l'école et des grands commentateurs.

Cette transformation consiste à confondre le point de vue ontologique auquel on se place en philos., avec le point de vue ~~strictement~~ expérimental des sciences dites exactes. Or la science expérimentale doit expliquer la nature en fonction de la nature: en fonction d'une nature qui reste entièrement formée par elle-même. On ne peut, à aucun moment avoir recours à une cause cosmique. Dès qu'on dépasse la nature, on sort du domaine des sc. expérimentales.

Le biologiste, p. ex., constate dans la paléontologie, dans l'embryologie, et l'anatomie comparée, et les faits de mutations, une ascendance <sup>rapportée au temps</sup> vers des types d'organisation toujours supérieurs qui dérivent les uns des autres. Il s'agit maintenant d'expliquer ces faits de constataction: c'est-à-dire de construire une théorie à partir de laquelle on peut déduire les phénomènes observés à titre de conclusion. Il est évident que cette théorie sera nécessairement explicative de quelque chose, qu'elle est évolutionniste: aucune autre théorie ne pourrait "expliquer" les faits. Ce qui s'oppose à la théorie évolutionniste n'est pas une théorie, mais tout simplement la négation de la possibilité d'une théorie, la négation de la possibilité d'expliquer les phénomènes en question. Mais il est facile d'opposer à cette prétendue impossibilité la fait d'une théorie qui réussit. Le phil. prétend que cette théorie ne peut être vraie, car elle suppose que le plus soit du moins, ce qui est contraire au principe de contradiction.

Cette objection cache des confusions très graves au point philosophique. En effet, elle suppose que le savant parle de causes au sens ontologique. Il n'en est rien. On dit souvent que le philosophe explique les phénomènes par leur cause première, alors que le savant explique par causes secondes ou prochaines. Cette distinction est d'invention récente. Lorsque le savant se sert du terme "cause" il faut l'entendre au sens métaphorique. Ainsi lorsqu'on dit que la chaleur est cause de la dilatation des corps : cela ne veut pas dire que la chaleur est quelque chose qui provoque la dilatation : cela veut dire tout simplement qu'il existe une relation constante entre la <sup>mesure de la</sup> température et, la <sup>mesure de</sup> l'volume, et la <sup>mesure</sup> de la pression. Et on pourrait aussi bien dire que la dilatation est cause de la chaleur : les relations sont parfaitement convertibles : et l'explication conduit à les ramener à une identité.

d'objection de ce philos. n'aurait de portée que si le tableau présentait assez les que son explication évolutionniste est ontologique. Or le philosophe, de moins, devrait savoir qu'elle ne l'est pas, et qu'elle ne peut pas l'être.

de problème philosophique que sortent l'évolution  
et absolument différent de celui que soulèvent les  
faits expérimentaux. de phil. doit chercher les  
causes ontologiques de l'ascendance dans la  
nature. Et ~~est~~ s'il y a ascendance, il y  
a certainement une cause suffisante. On peut  
l'affirmer dès l'abord. Et cette cause ne peut  
avoir aucun sens expérimental: si elle en avait  
un, elle ne serait pas la vraie.

d'erreur du philosophe consiste à vouloir expliquer la nature en fonction d'elle-même, comme doit le faire le savant. Or cela est impossible. Déjà pour expliquer ontologiquement le mouvement dans le monde inorganique, il faut avoir recours

a une cause active transformatrice. R le monde inorganique n'a en lui qu'un principe passif de mouvement — et remarquer bien que j'entend les termes "inorganique", "principe" et "mouvement" au sens photogénique — ; s'il avait en lui un principe actif de mouvement, il serait un vivant. Ce principe actif est nécessairement un vivant, un vivant présumé au monde inorganique, donc spirituel. — cause équivoque —

Ce principe actif spirituel qui ébranle la nature, et auquel nous devons avoir recours pour expliquer le mouv. dans le monde inorganique, et pas sa transcendance même, capable d'expliquer cette ascension qu'exige la nature, et qui se terminera à l'homme, sans intervention d'un acte créateur.

d'après la doctrine de l'hylémorphisme, toutes les formes naturelles possibles sont contenues dans la puissance de la matière, à l'exception de la forme ~~spéciale~~ spirituelle de l'homme. Eclaircir les formes de la puissance de la matière n'exige aucun acte créateur : la création se fait "ex nihilo sui et subiecti." — d'évolution dans la nature ne devient impossible que si nous la stérilisons à l'origine.

Je devais viens de dire que la nature exige une ascendance. Et je prend le terme nature au sens strict de "principe et cause intrinsèque de mouvement et de repos." Et cette exigence de la nature et au fond une exigence de l'homme. On doit dire que toutes les natures inférieures sont essentiellement ordonnées à lui, et qu'en dehors de lui, elles sont contradictoires. <sup>Elle est</sup> une nature et principe de mouvement. Mais le mouvement est essentiellement tendance vers autre chose : il n'est qu'une fonction intermédiaire. Il faut que tout mouvement ait en dernier instance abouti à un terme immobile.

à un être qui comporte dans son essence de l'immotile.  
 Cette essence immotile est nécessairement spirituelle.  
 Il faut que le mouvement se termine à un esprit.  
 Et à un esprit intracosmique, c'est à dire  
 lié à la matière : c'est à dire l'homme.  
 Aucun être impersonnel ne peut avoir d'autre  
 raison d'être.

En d'autres termes, si je ne connaissais  
 dans l'univers qu'une plante, je pourrais  
 cependant dire que l'homme arrivera. Je ne  
 pourrais en aucun façon comment il sera.  
 Je ne pourrais le prédire que comme un être  
 substantiel composé de matière et d'une forme  
 spirituelle.

Il remarquer bien que cette exigence  
 de l'homme se trouve dans les natures  
 inférieures, et qu'elles tendent essentiellement  
 vers lui.

Comment cette tendance est-elle réalisée?  
 Elle est réalisée dans la disposition de la matière  
 apte à recevoir la forme spirituelle de l'homme.  
 Cette disposition se fait en passant par toute  
 la hiérarchie des êtres naturels. Cette disposition  
 est répartie dans le temps. Et lorsque dans  
 un animal quelconque elle atteint un certain  
 terme elle devient dispositio ultima nécessairement  
propre. C'est dire que si la matière était  
 d'elle-même disposée à la réception de la  
 forme humaine, l'homme serait donné  
 d'emblée dès l'origine.

Avant de passer à une étude plus  
 approfondie de deux aspects particuliers de ce  
 problème, je voudrais préciser un point  
 d'une délicatesse extrême. Peut-on dire  
 que le corps humain fut façonné par  
 voie d'évolution?



Il faut faire une distinction. Philosophiquement parlant, le corps humain n'est humain que par sa forme spirituelle. Donc, ce n'est qu'au moment où il y a forme spirituelle créée que le corps est humain. Or, en ce sens, il est impossible que le corps humain soit produit par évolution. Mais si par production un corps humain, nous entendons tout le travail réparateur par voie de d'altérations et de disposition, il est entendu qu'on peut dire que l'évolution le façonne.

Jeune

Il est impossible de démontrer toutes ces idées avec rigueur. Je devrais m'arrêter longuement sur des notions fondamentales, tels que mobilité, nature, altération, disposition, génération, corruption, causalité équivoque etc... Je ne puis que vous citer les conclusions.

Je voudrais cependant vous donner un exemple ~~des réflexions~~ plus détaillé de réflexions philosophiques qu'on peut faire dans ce domaine, en me plaçant à un point de vue plus restreint.

Étudions, pour un moment, l'évolution de notre univers dans la perspective de l'espace-temps: pour montrer comment, à partir d'un espace-temps, l'évolution l'évolution amène des temps de plus en plus simples jusqu'à arriver à l'homme qui, dans sa spiritualité n'est plus dans le temps.

Transition

~~Conférence : L'induction du divin~~ 8

Nous avons vu hier que le terme ultime de tout mouvement au sens propre  
p.1. doit être en l.-m. immobile (1)

Papier : Couvert des Dominicains  
Montreal  
petites feuilles 5 1/2 x 8 1/2 -  
l'âme humaine

Immobilité - Existence simple - Spiritualité

Il faut que cet esprit soit intra-cosmique : être humain  
L'Être est la raison d'être du cosmos -

La nature = ppe d'une tendance exercée vers l'intelligence

p.2. Sortir du cosmos pour trouver une cause active qui pousse à la montée

a) Chercher l'intellect sur une pauvre petite planète (terre)

la surprise accompagne tout ce qui est grand

b) c'est ~~par~~ l'intellect. porte toute sa lumière en elle

Après comme on voit par le terme ultime  
de tout mouvement au plus propre / l'existence  
de puissance à acte / doit être en lui-même  
indivisible. Que cette immobilité / certaine  
ne existe simple, et qu'une existence  
simple extrême / l'immobilité. Ne peut tout  
être mobile et l'ordonne à l'essence.

Cependant il faut que cet esprit soit  
intelligible : car le mobile ne peut  
que tel et l'essence et l'existence ; d'autre  
part, le mobile ne peut être l'essence et l'existence  
sans. Mais l'essence et l'existence sont  
indivisibles / c'est à l'essence : le terme  
ultime de tout être mobile est l'essence  
elle-même / pour une forme spirituelle  
actuelle une fin : la, c'est la :  
une être humain.

C'est l'homme / qui est la cause  
d'être du comble. La nature est  
et s'ordonne / ordonnée à l'intelligence.

La nature, prise au sens strict,  
est une essence / prise au sens d'une  
essence / essence / l'essence / l'intelligence.  
Les choses inférieures / existent  
et se développent dans le temps / pour  
en arriver à la constitution de l'homme.  
Ce développement doit être au fond une  
accusation pour l'homme. Cette accusation  
est portée par la nature : elle est portée  
par la relation / l'essence / que sont les  
choses à l'homme.

Enfin / que cette accusation ne  
peut se faire de la puissance / action  
de la nature : elle est / mais elle  
ne peut pas être / car elle  
peut être / l'essence / l'essence  
que sont les choses / parce que la  
nature ne peut se faire / cette  
accusation.

Le premier, pour expliquer comment  
les choses peuvent être / sans  
l'homme, c'est / l'essence / l'essence  
sortir du comble / pour l'essence / l'essence  
cause active / l'essence / qui le  
porte à la fin.

~~Il est / l'essence / l'essence~~

Et cette essence / de l'essence / l'essence  
l'essence ne doit pas / l'essence / l'essence  
En effet / l'essence / l'essence / l'essence  
dans le monde / l'essence / l'essence  
pour l'essence / l'essence / l'essence  
une cause active / l'essence / l'essence  
car le monde / l'essence / l'essence  
ne peut être / l'essence / l'essence  
l'essence / l'essence / l'essence / l'essence  
à l'essence / l'essence / l'essence / l'essence

