

The act of creation

Alfonso Pérez de Laborda
Facultad de Teología 'San Dámaso' — Madrid
www.apl.name

I

1 In the very act of creation matter emerges with its fluent dynamism, endowed with the four internal ingredients (“internalities”) that constitute the world: space, time, “geometry” and subjection to laws.

1.1 We can talk about the act of creation, since there are reasons of correlativity woven in all that we are getting to know, and these reasons compel us to affirm with an enthusiastic yet rational assurance and certainty that the world is creation.

1.01 An assurance and certainty, rational indeed, since it is the result of the action of practical reason, which has nothing to do with any so-called pure reason.

1.02 Rational assurance does not mean knowledge forever. Irrational assurance is also possible, into which the former may degenerate, when, for different causes we do not follow the best reasons.

1.11 Correlativity, unification in a single line of understanding of many different lines of action and knowledge, which coalesce rationally in it; it is always something personal.

1.12 The answer to Leibniz’s question, why is there something rather than nothing, in a world in which the entire effort of carefully designed questions and of the answers found with effort takes place in a net of rationality that intends to be a net of consistency, cannot be but this one: because the world is creation.

1.121 The not being or being nothing does not mean the existence of a nothingness before the originating act of creation.

1.13 In the act of creation the fluent complex (conjunto) of what comes to be, and we cannot speak, even metaphorically, of a passage from nothing to being, which should happen already in time.

1.131 The act of creation in its fluent dynamism is the transit from not being world to being it.

1.14 In what will be the dynamic fluency, we mean a point in the world—in which four internal factors are generated— probably a single one and indeed unique to the extreme.

1.2 That matter can never be found in a nimbus of static elements, since the world as a whole and in its ingredients is essentially a dynamic fluency, hence the name fluent dynamism.

1.21 Fluent dynamism then, which constitutes history.

1.211 Thus we will be able to talk of a history of the world.

1.0211 History of the world is preferable to history of the cosmos, since the entire process and all the world processes, each one of them, take place in historical fluency.

1.212 Therefore, when we encounter time, we will already be talking about the historical character of that fluency.

1.22 Without exception all the processes that take place in that dynamic fluency have a gerund-like condition: thinks are always being to us, affecting us.

1.022 This indicates to us the person-related atmosphere in which we must speak of these matters from the very act of creation.

1.221 Consequently we can ask whether in any of the lines of this fluency is there an infinite-like reality within the gerund-like one: an entity in the process of being.

1.223 In our discourse on creation we consider essential from the very beginning the conjugation of the verb “to be” and the essential differences between the infinitive and the gerund. This brings us necessarily to the field of metaphysics.

1.3 Matter in its dynamic fluency is always conditioned as a process.

1.31 We are in the face of a process—rather a set processes— but there are reasons to think that such process is never chaotic, the mere result of hazard, but that it has a structure.

1.311 Can we think seriously that we can arrive where we are, i. e. we formulating a discourse on creation, as the result of mere chance of rather as the result of an uninterrupted cascade of chances?

1.312 We can never forget that it has come to a point in which we—at least we— be at the same time participants and active observers of that process or set of processes.

1.313 It does not seem reasonable not to consider ourselves as the red point of the fluent history of the world or as the last and most perfect point of this process. It is clear, why should we be such? But we can consider ourselves as the ones who can face and talk sensibly about it, and this has its consequences.

1.32 It is a process of which we talk with insistence of rationality and that we find as rational in its unified character.

1.321 For if our work were not rational, scientific, we would have nothing to say about creation, except mere mythological speculations.

1.322 And also at the same time if what we say were not rational, there would not be scientific discourse on creation but mere statements without any rational foundation.

- 1.33 If that is the way things are, we may talk about the logos, as the pre-Socratic philosophers did.
- 1331 Therefore there is a point of view, ours, on the act of creation that comes from the will of the Creator.
- 1.3311 In him we are installed, and all this discourse is the result of such standpoint of the logos in which we find ourselves.
- 1.3312 There is speech and word —ours and we probably can say that from no other entity in the world— on the act of creation that radically originates the history of the world.
- 1.34 This way, using the words of Heraclit, always so apt and pertinent, there is a logos, we as logos who perform the rational discourse on creation, and the Logos, who has created the world with such rational results.
2. The very act of creation is framed in an originating nucleus of rationality, and it is then —a then of the originating, not of time— when the fluency of matter in its dynamism emerges with its four internal factors that begin to set in motion the history of the world.
- 2.1 The originating nucleus of rationality, the climate in which the act of creation takes place and all its consequences, among which the providential preservation of creation is included, all gives itself as imbibed in it.
- 2.11 The fact that all the answers to rational questions about the things of the world come as answers of an underlying rationality, moves us to think that the very act of creation takes place already as an originating nucleus of rationality.
- 2.12 Otherwise the result could not be penetrated by rationality, as we see in the network of answers we are obtaining to our network of questions.
- 2.2 This originating nucleus of rationality is already given to us in the very act of creation, an originating nucleus indeed.
- 2.3 Everything induces us to think that this nucleus does not precede the act of creation, instead it is the very atmosphere in which the act of creation takes place.
- 2.31 Otherwise we would make of the Creator the Great Mathematician or the magnificent Architect who, prior to the act of creation, should make the plan of the world in his solitude.
- 2.32 Making use of his rational intelligence, in the deep recesses of his speculating being, before his will, which is present in that act of creation.
- 2.33 There is no reason to perform that dichotomy in God, which would have unacceptable consequences.
- 2.4 The act mentioned takes place within the complex unifying conjunction, which is an originating one.
- 2.41 It is decisive to speak of the voluntary act of creation with its consequences, both prior and subsequent to it.
- 2.411 This concerns no less than the freedom of the Creator in Himself and in his work, as the actor of that creation with its special characteristics.
- 2.412 It also concerns the consciousness of our freedom, which we will obtain as the ripe of fruit of the dynamic history of matter in its evolution.
- 3 Therefore, in the very act of creation, the radical origination of the world comes to the fore.
- 3.1 The act hints at an underlying sea that makes patent to us the complex fluency of the rationality of the world.
- 3.11 For when that underlying sea is discovered we are already in time.
- 3.2 But we cannot find with our mind an upward current of that act of creation.
- 3.21 We cannot go upward of that act of creation, for we would include there a time that does not yet exist since it has not been created.
- 3.22 In addition, it would carry us into the very thinking and the very being of God.
- 3.3 And yet, already in that primordial free act of creation, the Creator teaches us many things.
- 3.31 His astonishing power of creativity.
- 3.32 The exceptional and detailed care that He put and continues to put in his work, the result of an intense love to it.
- 3.33 The miraculous beauty of the world created, in its historical unfolding.
- 3.4 Will and reason of the creator are fused in that act of creation.
- 3.41 For creation is an act in which a will full of reason become visible, a reasonable will that originates in an immense intelligence.
- 3.0411 Are we not the only worldly beings capable of perceiving such visible signs?
- 3.0412 Would that not be equally true even if all discourse were a mere illusion?
- 3.42 This truth must have some consequences for us when are integrally ourselves.
- 4 This act is a voluntary fruit of the Creator who acts toward the outside of Himself, thus originating a world that did not exist before. Hence the impossibility of the materialistic naturalist interpretation clad in the expression “Deus sive natura”.
- 4.1 In that act God acts toward the outside, for otherwise He would be material, although only in part, since He would contain within Himself the created world.

4.11 Some thinkers believe that God makes a vacuum in one part of Himself, and it is there where he creates the world, in what they call the “kenotic” space, a space opened in the deepest recesses of God’s being. They consider their posture as “pantheistic”.

4.111 In this view space and time would be a part of the same God, in that way they would be somehow divine, though only in part.

4.112 If the Creator were enmeshed in space and time, he would lose at least part of his infinite freedom.

4.113 We in turn would lose the basis of our freedom, which would be left to the determination by the will of the creator.

4.12 If God in his act of creation did not act toward the outside of Himself, the world would be divine, even if was with a kenotic divinity.

4.012 This would have definitive consequences in the way to understand, if it comes to it, the Incarnation.

4.13 If things were as indicated, then the world would depend upon a God, pre-director of Himself, even if it is in the kenotic way, in the interweaving of its laws and its clinamen, i. e., in the initial conditions for every bifurcation in its history. At least we do not see how it could be otherwise.

4.14 The creation would lose its manifest freedom, the freedom of innovating creativity.

4.2 Creation if not the product of a chance that would put order in an original chaos, nor is it the product of a nature that with an iron fist would determine everything for ever.

4.21 The organization of chaos by pure chance is too simplistic an explanation for the complex order of the world in both its synchronic condition and its diachronic development, in its history. Moreover, it would recognize to nature the same role that we give here to the Creator, although nature would not muster will, intelligence, rationality and love, which would be separated from the world, when in fact they are essential to our history.

4.0211 Where would creativity be left, the creation of beauty, an essential factor in the history of the world and of its things?

4.0212 For where there is not will, intelligence and love, there is no creativity.

4.22 We would live in a world of strict and essential necessity.

4.221 How would it be possible in that world of strict necessity this discourse on creation and so many others?

4.222 Science would be but de necessitating unfolding of reality in its nude objectivity through the eyes and mouth of people without freedom of speech who would be mere spokesmen of that necessity. In this way the speaking subject would be a necessitating subject.

4.3 Creation cannot resist a process of thought that would base all explanation of the world and of its things in naturalization, or —what amounts to the same— in the view that everything, including the whole, is akin to nature, i. e. susceptible of scientific explanation.

4.31 That attitude is a false way to consider the role of science in our discourse, both particular and global about the world.

4.32 It makes use of a curious argument: not today’s science, of course, as is evident, but the science of tomorrow, applying the curious idea of Lenin: when the end of the world arrives, mankind will have already explained the world in its totality.

4.4 Understanding in this manner the discourses on the world, one would conclude that everything that comes in time can be explained by what was before without allowing any true creativity in the world process, for creativity would imply openness to an unpredictable future.

4.41 As can be seen, the attitude of naturalization assumes too many facile outlets; it believes that it can elude the problem of taking a metaphysical position by saying that being nature means this: that all things of the world must be approached from today’s or tomorrow’s science.

4.42 However, this terse way of reasoning is only possible as an ideological utilization of science that completely misses the true nature of science.

4.43 The dialogue with the naturalists is quite difficult, since their position is clearly ideological, full of assumptions without the proper nuance, which pretend scientific character; a false way to understand reason exclusively as scientific reason, so taken in a posture that is not rational.

4.44 This posture seems to be the mark of the “beautiful people” entrenched in power, and of the faithful servants who shun any critical dissidence.

4.5 Yet materialism —as a serious philosophical position— is susceptible to a systematic philosophical discussion.

4.51 And that makes both possible and reasonable a dialogue with it.

4.52 It is susceptible of a philosophical discussion, since, although it organizes its ideas in a way different from ours, it also engages in rational enthusiastic positions —as those presented in this paper— though equally subject to discussion.

4.052 Yet this creationist way of thinking appears to be, if we can say so, more susceptible to congruity than the one sustained by radical materialism.

4.53 The key point therefore will be the comparison of the rationality of both positions in order to see which one is more faithful to reality.

5 In the consideration of the very act of creation—in the dogma of creation—we find teleology, qualities and a sense, which offer themselves to us due to our rational capacity to find the originating nucleus of the fluid history of the world. And we do that, not only through data, theories or theoretical systems on the history of the world in its evolution, although these data obviously must also have a place in the congruent and correlative whole.

5.1 In this mode, the act of creation in its compossibility, gives us a principle of understanding of the history of the world.

5.11 However, in the same way the materialistic version would probably give us another principle for understanding the history of the world.

5.12 Although from all that we are saying in this study, it seems rationally more acceptable to accept the radical origination that takes place in the act of creation than to accept a pretended “*natura naturans*”.

5.2 In the creationist position we have found a global frame for a number of questions; and a frame of answers on teleology, quality and sense of reality, both human and material, in which we can believe, and believe rationally.

5.3 Such considerations offer us the convergent assurance or divergent doubt on the definitive validity or lack of validity of different theories; they do not offer scientific proofs but metaphysical convictions on the validity, not of this or that scientific theory, although these convictions are always expecting new and decisive instances, since they are rational enthusiastic affirmations.

5.03 These qualifications are akin to the Galilean convergence between the two books, Bible and nature, if we allow the play of compossibility—something that comes from us—to play its role, and we do not think of a mere pair of books that only converge and diverge in the authority of God.

6 This does not mean that the history of the world be actually or virtually present already in the act of creation. It means that in the original constitution of the world everything happens and develops as the result of that fluent dynamism, which is both originating and providential. This dynamism originates the diversity of the world, including eventually the human logos, capable of talking about that very act of creation. This happens when the dynamic evolution of the material world *in its creative capacity*, has attained the proper level of development.

6.1 As a result, i.e. through that fluent dynamism, without the need of new acts of creation subsequent to the originating act.

6.2 That does not preclude, of course, other acts, such as conservation and providence.

II

7 The internal factors of the very act of creation, which takes place as an originating nucleus of rationality, are related to the process of the fluent matter in its dynamism. As long as the world exists, those factors will be intimately related.

7.1 The expression “act of creation” may suggest that a sort of point is emphasized in which the four internal factors emerge: it is not the case, since in that act in which the original being is produced, the entire motion of correlations of that being is simultaneously produced; correlations within itself and with its parts.

7.2 In the same way in which the dynamism with which the world has been created avoids any static condition in the created world, bringing about a continuous mobility, so it happens in the four internal factors, which in turn have in them nothing static and finished forever.

7.3 Space, time, geometry and subjection to laws: all of it being the result of the dynamism derived from the creative act of the world.

7.03 Perhaps even our perception of that dynamism of the world is also the result of that act.

7.4 Space, time and geometry depend closely upon that motion of the world in its dynamic materiality, in the mutual relationship of its parts.

8 Space is the congruity of relativities with respect to the topology of contiguities existing between the different parts of the fluent whole and the things of the world within that whole.

8.1 Space is the very configuration of the worldly matter, which becomes manifest in the growing and correlated appearance of ever new sectors of fluency mutually related in ways of increasing complexity.

8.2 Space is not a receptacle; it is the net of correlative positions of the things of the world among themselves, positions that are essentially changeable.

8.3 Natural sciences are concerned fundamentally with space, with a topology and geometry, in a word with a mathesis.

9 Worldly time is the congruity of correlations with regard to the continuities existing among the different parts of the fluent whole, and of the things within that whole.

9.01 For in the fluent dynamism of matter, it is possible to distinguish between before and after, as if we were talking about a moving arrow.

9.02 Otherwise it would be impossible to talk about a history of the cosmos, for example.

9.1 In the interplay of the four internal factors, time is essential, for in it appears the essential moment of the originating motion of the world in its meander-like constitution of what comes and ceases to be.

9.11 Time would be the measurement, on the basis of a fluent before and an after, of that scattering of the worldly things in their changing coexistence, a scattering that originates everything there is, something extremely diverse and always unfolding toward greater complexity and expansion.

9.12 Different times are, therefore, linked to the things in the world in their motion.

10 Time and space are then the two internal factors that constitute the framework of the motion, which evolves by opening ways of fluent expansion that take place in that unfolding dynamism.

10.1 Space-time, maybe rather spacetime, after originating rationality, are the first and essential manifestation of the complex of matter in its fluent dynamism, the structure in which that fluent dynamism takes shape.

10.11 Time is the most important of the four internal factors, for it comports many decisive and problematic questions: history, memory, evolution, even teleology.

10.111 The so-called human sciences are in a special way related to time; today also the natural sciences aspire to the same.

10.112 Time is listed to.

10.12 Space is related to hunting and agriculture, to our primordial staying in the world, to artistic creativity, with the creativity of our technical and scientific manipulation of the world, with the construction of new realities.

10.121 Space is seen.

10.13 Creation is “anthropic”, i. e. centered in the human being.

11 “Geometry” is the global framework that rises from the configuration of spaces—and probably also of time if in the end the spacetime turned out to be in the atoms—susceptible to being analyzed and to opening new horizons of understanding beyond our experience of the fluent dynamism of matter, a rational configuration that we know is a complex rationality.

11.1 This way a network gets formed, which is already “geometry”, and always in a frame of subjection to laws; for the fluent dynamism of matter exhibits the structure of geometry, of mathesis. This structure is not imposed to the fluent development by the human mind; it is imbibed in the very dynamism of matter.

11.11 The more we penetrate in the “geometry”, in the mathesis, the more we see that the functioning of the fluent dynamism of matter in certain partial sectors—for we do not have a general theory of the legality of the world—muster areas of subjection to laws visible in the mathematical configuration of matter, which keeps opening to new and ever more complex spaces.

11.12 Geometry is not a referential-receptacle given ahead of creation, it is rather a framework that explains the creation, but as the result of the dynamism of the creative act.

11.122 Realism in mathematics, “the mathematical objects”, should be a constant way of being of the dynamism of the world. The topological characteristic of the elements that constitute the world have, always in the fluent dynamism, a specific type of subjection to laws, that makes us or allows us to see as realities with any concrete qualification, abstract objects that condense, so to speak, the very essence of a spatial and a temporal reality, of a topology that originates imaginary objects that are no real except in the sense of that abstract reality.

11.13 In mathematics that abstract reality would combine with what the process of evolutionary dynamism has produced in our logical reason.

12 The subjection to laws, from the origination of the principle rationality of the act of creation, and as result of that original dynamism constant in the temporal and geometrical fluency that originates the complexity of the existing world, indicates that things do not behave randomly but according to internal rules present in the motion from the very beginning, following constant marks and paths of a constitutive “legality”.

12.1 Yet it is a changing legality, due to the intrinsic play of the internal factors in their relationship which is condensed in consistencies, rational consistencies.

12.11 That unfolding of things that remain mutually related is neither predetermined before hand, nor is it produced by laws that must inexorably be fulfilled.

12.12 For the subjection to laws cannot run counter the greater creativity; otherwise the world would not be as it is.

12.2 Thus what we call “legality” is an operation originated in the creative act, a general and generic framework that explains what happened in the origin and what may continue to happen now in the fluent dynamism of matter.

12.21 The same happens with regard to the legality of the world in relation to the fluent dynamism, which is not given once and for all in an absolute form but also as a set of relative vectors.

12.021 The absolute is the dynamism received in the act of creation.

12.22 Dynamism is evolving condition of the world, a condition that is complex for the many interrelated concrete manifestations, in which teleology may be surmised.

12.221 Undoubtedly one the goals of that teleology is the fact that we be meditating, both in theory and in our experience, on the original act of creation.

12.3 We understand the above mentioned laws as a relational internal reference to the comportment of things produced within a geometry of the spacetime. In this way the laws appear as the line, or better yet, the complex network of lines of the comportment—in its incredible dynamism— of the things generated in the original creative act and its subsequent evolution.

12.4 For we, through the engagement of our practical reason, perceive in the comportment of the world a legality that governs the world, a legality that allows us to posit a rational knowledge of the world in its true reality.

12.04 We do not impose through convention a legality to the world, nor that the legality preceding the world become manifest to us when we know the world in its reality.

12.41 We perceive the reality (the being-there) of the world as a framework of laws that we express as something that is in the last instance related to the reality of the world.

12.42 Hence it is a framework of laws whose only claim is to “represent” what the world truly is. It does not intend to impose a view of the world from our “sensitivity”, or an imposition of the world to us.

12.43 The legality is something we attribute to the world through reasons whose effect is a reasonable conviction that what attribute to the world is in fact a feature of the world.

13 World: the complex whole: the cosmos, the universe, and the things that are also in that whole constituting and conforming it. They are also there, and the verb “are” means here not the metaphysical “being” but their actual presence, the things that we see and touch.

13.01 This allows for the possibility of looking to the world and its things in the manner that we call science.

13.02 Above all it allows to discover what we will find fully as reality.

13.1 In the action of practical reason a decisive step takes place: the world and the things, without losing their condition of being a reality out there, lead us to see beyond, since they lead us to see a reality in which we ourselves are.

13.2 Entering in that metaphysical reality, we see another face of reality, not just the one in which we are installed (estamos) but the reality in which are in our being (ser).

13.4 And we cannot remain satisfied in the complex of a mere installation.

13.41 There is a beyond in reality.

13.42 thus we are beings of reality, beings in reality.

14 It is essential to think that God, free and without any necessity, prior to his act of creation designed a framework of legality for the world.

14.1 We would give ontological character to the “legality” by locating it in a level of strict existence, converting therefore the scientific laws into something essential to the being of the world and its objects, assuming also that legality would precede the existence of the world.

14.2 This would confuse us seriously in what we believe about the legality.

14.21 If that were the case our scientific laws would be the ones with which God created the world, laws designed in his thought before the act of creation.

14.22 We would forget the essentially provisional character of the scientific laws, as the history of science shows. They are only laws of attribution—provisional so far.

14.3 That legality after all is nothing but our legality attributed to the world; we do not know of any other one.

14.31 Attributed indeed, but with a rational enthusiasm, resulting from other enthusiastic attitudes of the operation of our practical reason.

14.32 For we are no vice-gods.

14.33 And it is us who strenuously seek the legality of the world, and this is an attributed legality but one that belongs to the world itself in its dynamic development.

III

15 The fluent world-liness that unfolds in history from the act of creation originates an astonishing creativity: a creativity of an indefinite number of vectors.

15.1 For that fluent world-liness in its continuous dynamism that derives from the act of creation, manifests itself as history, history of the world and of the things in the world.

15.11 It is not a set of movements by chance that take place without order and structure. Rather they exhibit a direction and telos in their motion.

15.011 Because it is so, we can study in our immense synchrotrons stages of development close to the original big bang.

15.12 Adynamic increase of the four internal factors takes place which, in that continuous accumulation of complexity signals a direction.

15.121 For the four internal factors are not merely static realities; they rather move in their own way, in that fluent dynamism, we have mentioned earlier, opening new and ever more complex paths.

15.122 In the case of time, for example, obviously there is an evolution of the cosmos.

15.13 That direction expresses the teleology of world history.

15.013 For a history points always to a beyond.

15.131 The precedent makes sense in so far as the direction of history comports traces and signs. This implies that history is not a mere succession of things that appear and disappear without a relations that allows us to speak of a real dynamism of history.

15.1311 It does not seem rational that the world proceed just to its thermal death, which so deeply frightened our ancestors.

15.1312 For the diversity that rises in the motion intends to reach the very reality that confronts us. Proof is that it reaches it and finds it defined by patterns and ways of behavior penetrated by laws. This happens with the galaxies as well as with the fingers of the plantigrades.

15.132 We can become convinced, and indeed we are, that the world is not a random product, the result of mere chances. On the contrary, in its history shared ways of being become manifest.

15.14 In this way the history of the world in its creativity exhibits a linguistic condition.

15.15 The motion of the world unfolds in the different ways in which it comes about.

15.12 Therefore no determining factor thwarts the dynamism of the world; on the contrary, it musters an undescrivable and continuous creativity of new things.

15.3 If we can speak of freedom for the human being, no doubt matter in its dynamism, in addition to being a prior condition for that freedom, also possesses a type of freedom appropriate to it.

15.31 That freedom appropriate to matter means that in certain nodules in the network of matter we cannot predict what will happen. This does not mean that they are not subject to laws.

15.14 The sort of freedom attributed to matter in its dynamism derives from our own freedom.

15.41 If it did not exist, as is the case for Descartes, we would have to accept the dualism of *res extensa* and *res cogitans* to which nothing compels us in our enthusiastic rational convictions. The Cartesian view would remove from our philosophy its identity as a “philosophy of the flesh”.

16 The laws of mathematical structure —structure to which all sciences aspire— are normally pre-determining.

16.01 “Are normally”, for there are exceptional cases in which that pre-determining energy does not appear, in quantum mechanics for example.

16.1 In general, and simplifying to the extreme, those laws have the form of $y=f(x)$.

16.11 From a given point x_0 —normally a point in time that then becomes t_0 — they pre-determine completely the entire field of their practical applicability; concerning the variable time, they pre-determine the future, and also the past, of that to which they are applied.

16.111 Let’s consider the first laws, one whose variable is time, y another one whose variable is a distance: $e=1/2gt^2$, where e is the space of falling of a grave object, t the time that elapses between the beginning of the fall, and g the acceleration of gravity at the point where the grave object finds itself. $F=kmm'/d^2$, where F is the force of mutual attraction of two masses, m and m' , whose centers are at a distance d , k being a constant *ad hoc*.

16.112 One establishes a series of lineaments which are dependent on the space of falling; the other one, a set of attractive fields of force that depend on the distance of the grave objects-

16.113 The law of universal attraction is symptomatic. Poincaré demonstrated that it has no solution for three grave objects, since it provokes an essentially chaotic movement; hence in order to make its application possible, simplifying hypotheses *ad hoc*, but rational ones, must be devised.

16.12 If the independent variable is time, the future lies in increasing that variable t_0 till $t+I$, and the past in reducing it till $t-i$.

16.121 We can change at will the independent variable x , always in the total or limited field in which that function as at work, i. e. the law of mathematical structure, in order to obtain the values sought from the dependent variable, which offers us the result of the law in the points in which we apply it.

16.2 Once a law is known, we know exactly one essential element of what we seek in order to realize the compartment of the world and its things in the field to which they belong.

16.02 Let’s take as an example the complex set of cosmological laws offered to us the Einstein’s theory of relativity.

16.21 If we were capable of solving both elegantly and easily that complex set of equations, we would know everything we are seeking about the whole of the cosmos.

16.212 However, this is impossible. For this reason we must devise simplifying and rational hypotheses in order to find some type of solution.

16.0212 The first time this was undertaken, after the admiration of everybody when they began to guess the beginning of a solution for Einstein’s equations, it turned out the cosmos was empty of mass.

16.22 The most reasonable hypothesis at that point, the one that combines the complexity of those equations with the hypotheses that appear reasonable in order to find solutions to a small number of experiments that make sense only in those equations, is the cosmological theory of the initial big bang.

17 In this context are crucial the so-called initial conditions.

17.01 Taking also into account, as we just saw, the simplifying hypotheses to which we are obliged in order to find sufficiently correct solutions for the part of the world on which we think. But this problem, although it has its place, has nothing to do with the initial conditions.

17.1 The laws —i. e. the legality— are not abstract mathematical monsters that require a strict application, without regard to the conditions for that application.

17.11 Since those laws are applied in a specific condition of the world, which is also specific and concrete.

17.111 As if that specific worldly condition retained consciously its past history up to that moment, perhaps as a wheel descending downward, and which is —so to speak— directed from the beginning by inertia of its own movement.

17.112 Moreover, continuing with example of the wheel, a minimum obstacle encountered in its downward falling disturbs the movement to that from that point on it takes unpredictable directions.

17.113 And that encounter with obstacles becomes a fact in all the moments of the downward falling of the wheel.

17.2 For the laws, the legality, admit of a rigorous application only when we devise the simplifying hypotheses. This means that in their concrete applications in distinct conditions of the things in the world, the application of those laws exhibits a margin of accuracy that must reckoned with.

17.21 This is what happens with the three graves of Poincaré, even if we refine the application to our case through the pertinent simplifications, which will be growing in rigor until a precise experiential exactitude is reached, as is the case with the solar system, for example.

17.22 This refinement is continuous; for this reason the application of laws gains progressively in validity.

17.3 Therefore, the initial conditions, the *klinamen*, as the ancient Greeks put it, give us a behavior of the worldly realities to which we apply laws, that can be, and indeed it is, full of surprises and shocks.

17.031 Suffice it to remember the beating of the wings of the butterfly in the Amazon river, which ends up raising a hurricane in the Great Lakes.

17.31 Therefore, the laws, the legality, do not provide a sufficient basis for predicting the real behavior of the things in the world, for their behavior, without ever ceasing to be predetermined —if we understand deterministic laws— can be understood only through the exact knowledge of the initial conditions, the *klinamen*, conditions that are constantly repeated.

17.32 However, the exact knowledge of those initial conditions, the *klinamen*, escapes us. In addition, those conditions can appear in all the moments of the development of the thing in questions in the knots of the network of bifurcation that will open the paths of the movement, as in fact is the case.

17.33 The problem becomes much more complicated when the worldly thing to which we apply laws of exact compliance is enormously complex.

17.331 This happens for example with our brain, which is in itself as complex as the entire universe.

17.332 This does not mean that scientific knowledge is not valid; it only makes us humble as to the range of our deterministic predictions, although science, of course considers as its mission to reach that point. For science aspires to know, to explain, to reach valid conclusions.

17.34 The limitations pointed to do not preclude the strict force of the subjection to laws, which opens paths and leaves traces and marks.

17.341 In this way legality is always a frame of reference, not a predestination.

17.342 A constraining frame of reference, which nonetheless, through the clinamic processes leaves the door open to creative innovations in the different types of things in the world.

17.3421 Horses and human beings have five fingers in each member, but the process of evolution, theirs and ours, has made them what they are, pure horses, and we what we are: pure persons.

18 Our mind applies different ways of approach to the worldly things depending on whether they go downward or upward in their dynamic movement.

18.1 For our outlook upwards seeks what has already been in world history.

18.01 What they already are as fossils of what has been in the world, as happens, for example, with the history of evolution.

18.02 Though on many occasions, in astronomy for example, the process of formation of suns repeats itself. This implies that we have a sure experience of what is going to happen with them.

18.03 But the unique processes that take place in the evolutionary dynamism of matter, for instance the initial explosion, and above all they are indefinite not in the detail of a small fact or thing of the world, but in the span of a global evolutionary development.

18.04 In these cases, on the basis of what we progressively get to know, we seek analogical and imitative approaches of legality and experience for what we desire to know. Such is the case with the enormous synchrotrons with which we attempt to uncover the secrets that bring us near to the original big bang.

18.12 In both cases that line is a guessing of our knowledge based on a long and complex path of both theory and experience. This is the way science functions, and in both cases we resort to attribution.

18.121 But the two ways to look are essentially different with respect to the subject of attention. The look upward is a guess based on something structure that has already been; the look downward is a guess on what is not yet structured and still depends on the interplay of the laws and the successive “*klinamina*”.

18.1211 And we are able to talk only of that which has already a determined structure, for our guessing is not a blind game.

18.122 However, the ways to guess are very distinct; in the first case it is a surmise of what already has the structure of having been; in the second, on the other hand, it is a guess of what still has the structure of an essential creative freedom.

18.123 Yet, in the first case, the outlook upward, there is still a long way until it would be possible to master what has already been. In this sense, this outlook is similar to the other, since in both cases we move in the unknown.

18.1231 But one of them, the first one, is a creative look in order to ascertain the laws and *klinamen* of what has already been. If and when we succeed in this search, we encounter the objects there close to our hand.

18.1232 Although it is obvious, we become observers of the creative ways opened by the objects that we contemplate in our upward outlook; we are, so to speak, in the face of a finished work of art.

18.1233 In this way we discover the majestic operation of creativity that has brought about so many new realities.

18.1234 All this, through a process of analogy and mimesis, will be very interesting in our outlook downward.

18.2 In this outlook we search for what is going to be.

18.021 Therefore it will always be a search for a beyond.

18.022 And this is the central point as far as we are concerned, for our flesh—we are here in a philosophy of the flesh— seeks always the beyond.

18.21 One would say then that we can quibble on how things and their laws have been, but they already have a profiled history that has even left traces and traits in it, and those traces and marks will be essential for us in our outlook downward.

18.211 Yet our upward knowledge of them is shaky. This is why we probably come to think that the outlook upward is equal to the outlook downward.

18.2111 For all this, when we study the original big bang in the high energy synchrotrons, we may think that with our scientific research we discover all that has been and as it has been, forgetting that that research is rather a set of attributions of ideal types, in the terms of Max Weber.

18.212 If also in the upward outlook there is attribution on our part and not apodictic certainty, it is ought to the scarce clarity we have regarding what has already been, i. e. regarding our theoretical and experiential ignorance of what has already been.

18.213 Can we get to know in an integral sense what has been a worldly movement in its dynamism with its laws and choice of its bifurcations?

18.2131 We know it will not happen because in what we look upward the laws are still sufficiently vague as to leave as n ample framework and because there is the refined problem, the *klinamen*.

18.213 Will we ever be able to know integrally what a worldly movement in its dynamism will come to? Obviously not. For this reason, also here, and with more reason, our outlook downward will have the style of the ideals-types.

18.2131 Will we ever be able to forget the motion of the history of science?

18.22 We are here in the contemplation of a work of art that is evolving before our eyes, when we consider the creativity of the world matter in its fluent dynamism, a creativity that comes to us from the very act of creation.

IV

19 The fluency of matter in its freedom, or better, as “fore-freedom” or “pre-liberty”.

19.1 The processes in which dynamic matter unfolds starting with the originating act, produced in a climate of rational creation, provoke a movement of matter, unpredictable to the point that it is, as we have hinted, “pre-libertarian”.

19.11 Its complete development in the downward outlook is only predictable as attribution; then in the future we will see how things end up.

19.011 The least we can say regarding the “fore-freedom” is that the evolutionary dynamism does not depend on us, though we are a result of it.

19.111 Attribution is then enthusiastic rational posture: we have the best reasons, well founded on both theory and global experience, to propose our theses as the best interpretation of the phenomena of the world, and we are not going to abandon it without serious reasons.

19.112 Concerning the future of world dynamics we make predictions that we hope —with serious reasons— are on target.

19.12 But let's note that, due to the limitations of our knowledge, this will never be a complete one, and we cannot rationally think that we will ever reach the ideal level of knowledge —much less a comprehensive one. It would rather be a scattered knowledge but one that aspires to reveal something beyond the surfaces.

19.012 It is not reasonable to sustain the Galilean theory of the progress of knowledge as an expanding drop of oil. It is not yet extensive in the complexity of the world, but intensive, in the specific field under study, our knowledge as secure as the knowledge of God the Creator.

19.121 We know a lot, but much more eludes us still, above all in the most general field of the laws that govern the world and the things within it.

19.122 This fact converts science into an extraordinary instrument of our desiring being.

19.13 The idea that the world is predictable —and thus totally determinate and determinable, would assume either that somebody is more capable than us to know the world in itself —maybe a vice-god— or would assume a Leninist posture. None of the two premises seems very rational.

19.131 With regard to the object that is known and the way to know it, we can only be responsible for what is in our reach, which is a lot.

19.132 And we try to get into the unknown by means for analogy and mimesis.

19.14 These processes are not predictable, precisely because everything compels us to think that matter in its dynamism enjoys, from the moment of its creation, an immense capacity to obtain “pre-liberty”.

19.141 The entire process of its dynamic condition is prelibertarian, in so far as it is unpredictable and ever increasing in its level of freedom.

19.142 The entire process moves toward complexity.

19.1421 There are paths of continuous increase in complexity. Today, due to the combined interplay of the four internal factors, which take place always as an originating cradle of rationality, the whole as well as the parts are more complex than they have been in the past.

19.01421 It would suffice, for example, to peruse a history of time.

19.1422 This happens in a special and exclusive way in the human being, unique result of the dynamism of matter in history, a development that started at the moment of creation as an originating energy of rationality.

19.01422 It would be laughable to see ourselves already jumping at the first moments of creation, would it would be equally laughable to sever us from that moment and from the dynamism of fluent matter.

19.2 Degrees of liberty in matter in its dynamic development.

19.02 An insect struts in a sprout of wheat: a degree of freedom; a mouse moves around the floor: two degrees of freedom; an eagle hovers majestically in the sky: three degrees of freedom. History involves a fourth degree of freedom, the one of time, although we know that a philosophy of flesh must distinguish in the human being a time of the body —physical time— and a time of the soul.

19.21 The things of the world, in the first moments after the initial explosion, may take shape in hydrogen and helium, when the sky became translucent: it happened this way, but it was not necessary, it would have been differently: it happened that way as the result of a kinamic legality.

19.22 This is the case in each bifurcation of the worldly paths; it has been so but it would have been otherwise or might not have been altogether.

19.23 This process of kinamic legality is the one that generates different degrees of liberty.

19.0231 Animals do not need to be attached to their location as is the case with vegetables.

19.0232 Our desiring being imagines strenuously, and with reason we bring to fruition what we desire, when in fact we may have been detained for a long time in pure imagination: we always desired to fly; now we actually fly.

19.3 The acquisition of degrees of liberty by things in the world derives from a process of evolutionary dynamism, which takes place always in the climate of originating energy born from the exceptional interplay of the kinamic legality.

19.4 When these processes are not the result of necessitating chance, at least we can say that they possess a teleology, and that is that we become capable to observe them rationally.

19.5 But if we ourselves look always to levels beyond, these levels are in the end the teleology of the act of creation.

19.05 If we have the rational possibility, i. e. the possibility of seeing the interrelation of things, that the lines of the history of our stretching converge in a single point beyond —as is the case in a philosophy of the flesh— we must admit that that point of convergence of our being in its plenitude, a point that usually call point Omega, is the last goal of the act creation.

20 Although we are material entities of flesh, we are not a product subject to predictability.

20.1 If we could be comprehended in a definition, we probably would be predictable.

20.11 In a definition that would reflect our essence all our effort would try to unravel in it rational divinations, i. e. in finding ways to explain what is contained in that definition. This would allow us to predict our being and our conduct.

20.011 True, some definitions are so generic (brilliantly so) that it is impossible to display all their meanings. For instance, “rational animal”, although it does not seem that this definition is the most appropriate for the defining characteristics of the human being.

20.12 Our knowledge does not progress by means of definitions. They at the most condense what has happened, but do not help in the progress of knowledge.

20.13 The case is different with the ideal-types, that help us organize our knowledge and adumbrate better solutions to our problems. What we have called attributions belongs in this category, obviously if they are combined in a dynamism of unification.

20.2 And yet we come from the fluency initiated in that act of creation that is an originating energy of rationality.

20.21 Everything we are has profound and surprising roots in the history of the world: the hydrogen of our body, for example, emerged a few minutes after the big bang.

20.22 The pre-liberty of fluent matter insures our own freedom as the result of that dynamic fluency.

20.23 As a product of the dynamic evolution of matter that proceeds from the act of creation, in its originating of rationality, we are endowed with a unique quality: reflective and think consciousness, which can turn on the world and its history, and on ourselves.

20.24 Always with a searching look into the beyond. We are thinking being.

20.3 For our corporeal being —being in flesh— that makes us brothers of all worldly entities, the galaxies and all the animals, has astonishing capabilities of consciousness and freedom —although, it is true, of falling— that opens us to infinite spaces, so that we are creative flesh in its plenitude.

21 To listen to Isaac Albéniz’s Suite Iberia performed by Esteban Sánchez or by Alicia de la Rocha: is it not an astonishing artistic creation in all its depth as the very act of its composition? Is not this seductive listening the goal of that primordial and originating act? Does it not project us as a well directed arrow toward the very center of beauty?

21.1 But then, is not this ability of ours to contemplate beauty through listening the reason for the enormous dynamism of matter in its fluency, produced as an originating energy of rationality?

21.2 For that ability to listen consists of pure physical, chemical and electrical forces, of pure percussions of the air on our ears, in very complex processes that become chemo-electrical fluencies, of astonishing connections in the network of neurons, all of which become in the brain pure fascinating beauty; matter listening to matter; a materiality that ends up being listening to beauty, creation of beauty.

21.021 Such is the process of creation: it begins in matter, but in the fluency of the creative dynamism of matter, it becomes transformed in the beyond —and “beyonds”— of beauty.

21.022 Metaphor and mimesis are essential to understanding both processes, the creation of the world by the Creator, and the creation of the work of art through that admirable unifying conjunction that, turning to the Suite Iberia, conform Albéniz, Esteban Sánchez and the listener.

21.3 But it a matter pregnant with the degrees of freedom that it has reached in the human being, to which it arrived through the subtle play of so many subsequent and creative plays of laws —even if they intended to be determining— and *klinamen*, through which the infinite doors of creative freedom were opened to us.

21.4 In this discourse and what it represents, everything, as can be seen, is centered on the human person, for the listening to the materials sounds in the vibrating air converts the person in the final target of that consciousness of itself that was looking upward, and that looking downward opens itself to fascinating beauty, metter yet, to the attractive Beauty that drags us with soft persuasion.