

LIFE, SUBJECTIVITY AND CREATIVITY: ALFRED NORTH WHITEHEAD'S METAPHYSICAL UNDERSTANDING OF EVOLUTIONISM

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Abstract: The theory of evolution has had a well-known complex and tumultuous public journey, from its beginning as a shocking and bold hypothesis about animal life on Earth, until its present status almost as common ground and, as some may argue, an almost (scientific) common sense framework for interpreting the metamorphoses of life as a general phenomenon. Although the biological and environmental mechanisms of evolution have been thoroughly described and structurally analyzed during the past century and a half, *the metaphysical possibility, grounding and implications* of Charles Darwin's ideas were rarely accounted for in a philosophically satisfying manner. In my paper, I will argue that Alfred North Whitehead's process philosophy has at its core exactly such an attempt *of deducing, coherently expressing and conceptually understanding the inner metaphysical significance* of speaking about 'life' in evolutionary terms. This attempt is not the only source of Whitehead's groundbreaking metaphysics (as cosmology), but is among the most important because is *directly* related to his famous formulation of the *Fallacy of Misplaced Concreteness*, to his description of an 'actual occasion' inspired by the 'vibratory organism', to his non-Cartesian insights on 'subjectivity' as embedded by 'feelings' and a 'subjective aim' and, finally, is related to his rendering of *Creativity* as the *Category of the Ultimate*, the driving force of existence. Especially regarding *creativity*, the theory of evolution has been of invaluable support, yet, according to Whitehead himself, the scientific mind is leaning towards neglecting this beautiful and optimistic side of evolution, concentrating more on its destructive and brutal side: 'The other side of the evolutionary machinery, the neglected side, is expressed by the word *creativity*' (*Science and the Modern World*).

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Alfred North Whitehead has certainly remained in the history of Western philosophy as an adventurer in the sense that he valued novelty and courageous speculation both on aesthetic and metaphysical grounds. This adventurous spirit combined with a thoroughly philosophical mind is not commonplace and is not only an expression of subjective temperamental features, but is, in fact, a logical consequence of Whitehead's cosmological framework. *Going on an adventure* presupposes embracing the unknown, going forward without understanding all the details implied on the way and gaining pleasure from the sense of excitement be felt before beginning the journey. This is the general description of what it feels like to start an adventure, applicable to concrete geographical trips or to groundbreaking research, but also to ideas in their historical development or to the

universe as a whole. An adventure can end up good or bad, it is full of perils and full of enjoyment, it can never be done the same way twice and it always has as an emotional background the hope that something important will reveal itself or that at the end some new insight on things will be obtained. Whitehead loved the term ‘adventure’ precisely because this is the most plastic term to describe the flux of events we call ‘life’.

My aim in this essay is to argue that among the important sources for this adventurous perspective upon existence are Charles Darwin’s ideas about the evolution of species – or, to rephrase it, *Darwin’s ideas about the adventures of species on Earth*. The interest Whitehead has, as a philosopher, on evolutionism is not only directed towards the factual proofs and evidence in support of this theory or towards the internal coherence and logical solidity of the concepts implied, but is directed first and foremost to *the extended metaphysical significance of accepting these proofs and concepts*. Philosophy should be concerned, according to Whitehead, with giving more profound interpretations to such specialized theories within a more general speculative scheme of ideas in order to deepen our understanding of ‘experience’ in its complexity and nuances. Accordingly, what Darwin did was not only to shed light on some categories of facts and to deduce from the thorough observation of these facts the most comprehensive and probable scientific explanation, but – with the way he constructed his arguments, with the way in which he strived to find an explanatory unity for his observations, and with the way in which he formulated the theory of evolution through natural selection – to produce a landmark in the adventure of European thought. From a philosophical point of view, this landmark can be briefly described by accounting for the following theoretical effects that consciously or not, accepted or not, permeate the 21st Century and represent the *fundamental and simple* assumptions for many contemporary ideas and movements (both social and intellectual):

- Firstly, by accepting Darwin’s **findings**, *we ought to accept the effects of time upon Nature*. When one studies geological facts, one is forced to believe and understand that a very long time ago the entire surface of the current planet looked very different from what we are accustomed to seeing in our daily actual experience. Some similarities can be found, yet very distant from what we see and know about current ecosystems. This is *a shocking mental experience* grounded on geological facts, and the implications of such a shock should (still) not be underestimated. Nature can change and, specifically, individual types of organisms (species) can change drastically in their structure, organs, form, aspect and behavior. The immensity of the geological time-scale cannot be grasped by the mind, but the fossils and their stratigraphic arrangements – today, alongside other contemporary means of analysis provided by technology and genetics – are the primary proof and grounding for its theoretical elaboration. This first element concerns the *methodology* used by Darwin to sustain and verify his theory.

- Secondly, by accepting Darwin’s *explanations* about how and why modifications are steadily inoculated into organisms, *we ought to recognize and*

understand the reciprocal action and reaction between individual organisms and their environment. Principles of organic life are not imposed upon ecosystems, rather they are generated through mutual relations and dependences between organisms. For understanding the shift in thought that came with Darwin's 1859 book, this aspect is as important to grasp as the perspective upon the impact of time mentioned above because *it is not time alone, by its sheer existence and motion, that generates change in nature, but it is the activity of organisms within an environment and their reactions to events that are the primary cause of change and time.* This sole fact is the theoretical basis and assumption not only for contemporary scientific research, but also for contemporary ecology and for the urge many activists express when stressing the importance of preserving present ecosystems. We can also think about the applications of this idea in anthropological and sociological work and, of course, in philosophical thought. Also, this extension of the implications of evolutionism from science towards society is significant for the way important ideas stretch their influence beyond their initial context of expression. This second element concerns the *interpretation* of Darwin's findings.

- Finally, by accepting Darwin's **descriptions** on natural history, *we ought to equally acknowledge, on the one hand, the destructive and competitive side of evolution, and, on the other hand, the creativeness nature exhibits through the adaptations of organisms.* The metamorphoses of living organisms are a statement for nature's general leaning towards creativity. This aspect of evolutionism is not a plain ecstatic reaction in front of nature's luxuriance and unexpectedness, but is actually **a metaphysical consequence** of critical importance because it refers to a phenomenon that transcends biological interest and it refers to a tendency of nature to exhibit the need for a 'transcendent aim,' to use Whitehead's words¹. This consequence is derived from the first two observations about time and about the relation between individual organisms and their environment. Proper change and, hence, adaptation cannot exist without creativity, which is the driving force towards novelty.

All these three effects or implications of evolutionism can be found in many contemporary doctrines under different headings and in different conceptual settings. Also, by themselves, they were not thought of only in Modernity or only in Darwin's famous book published in the middle of the nineteenth century; the ancient world had its own multitude of formulations of these ideas, too. Yet, Darwin's *Origin of Species* truly is a different matter than what was previously expressed for at least two essential reasons: first of all, he lived and he carried on his research within the modern scientific (even positivistic) framework of analysis, the factual substratum of his book, namely the thorough classification and corroboration of observation and details and his unbiased endeavor to test for almost twenty years the validity of his general conception, being the result and

¹ Alfred North Whitehead, *Adventures of Ideas*, New York, The Free Press, 1967, p. 81.

peak of this way of thinking; secondly, when taking into consideration an idea, it is mandatory to equally look at the theoretical context in which it is developed, the formulation of an idea in itself not being enough to determine the originality and the meaning of the terms involved.

Regarding both historical influence and conceptual context, Whitehead determined that, in respect to creativity, although evolutionism is a formidable argument and basis for opening up discussions about the ‘productivity’ of life and nature, the focus was transferred almost entirely onto the disruptive and negative realities of Darwin’s findings: ‘The other side of the evolutionary machinery, the neglected side, is expressed by the word *creativity*’.² Even if we look at the full title of Darwin’s book, we can easily observe exactly this emphasis: *The Origin of Species: By Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. The accent is on competition, on the struggle for subsistence, on power, and on the selective reality of life. This accent is due to other cultural factors in that period, but it had a great impact on how we interpret evolutionism today. *The emphasis on natural selection is the scientific side of the theory, being directly correlated with the facts under Darwin’s scrutiny, and hence, is natural to be of more interest in a cultural environment dominated by positivism. The creative side of change and evolution and the admiration for the ability of organisms to transform themselves and their environment is the metaphysical implication of the theory.*³ The world, as it reveals itself according only to bare facts, is competitive, sometimes brutal, capricious, and does not get along well with the humanitarian ideal of peace, tolerance, preservation of life for life’s sake, protection for those who are weak(ened) for some reason, and, as a corollary, *beauty*. As Whitehead elegantly puts it:

‘Unfortunately, the Malthusian doctrine, in its popular rendering, affirmed that as a law of nature the masses of mankind could never emerge into a high state of well-being. Still worse, biological science drew the conclusion that the destruction of individuals was the very means by which advance was made to higher types of species. This was the famous doctrine of Natural Selection, promulgated in 1859, by Charles Darwin. This exclusive reliance upon Natural Selection was not characteristic of Darwin’s own theory. For him, it was one agency among many others. But, in the form in which the doctrine reigned in the thought from that day to this, Natural Selection was the sole factor to be seriously considered. As applied to human society this theory is a challenge to the whole humanitarian movement.’⁴

² Alfred North Whitehead, *Science and the Modern World*, Lowell Lectures 1925, New York, The Free Press, 1967, p. 111.

³ As we can observe, today there is also much focus on the way organisms cooperate, on the mutual ‘agreement’ and reciprocity between species in order to survive. Yet, Whitehead’s observations were probably made in a period when these characteristics were not as obvious as the struggle for life. In fact, his own philosophy was a source of inspiration and concepts for future (contemporary) environmental ideas. Also, the metaphysical need for a cosmological contextualization of evolutionism remains to be accepted and developed.

⁴ Alfred North Whitehead, *Adventures...*, *op. cit.*, pp. 35–36.

Hence, the fact that Whitehead managed to propose a metaphysics which consistently centers on Creativity as the Ultimate Category and on process as the definitory structure that constitutes the actual entities, was not a common undertaking and (I assume that) it presupposed the conviction that a more thorough philosophical investigation and interpretation of evolutionism is required.

As we know, Whitehead is among the few philosophers who recognized the fundamental need for a new cosmological scheme⁵. The metaphysical lessons from Darwin's theory were assimilated by Whitehead and some of the conceptual/deductive results were:

- The internal coherence and reciprocal dependence of the categories in his speculative scheme;
- The way he understood 'actuality' and how he defined the 'actual entity', as *organism*;
- The special place of *Creativity* as the driving principle of actuality;
- The importance of relatedness and openness towards the world for an *actual* entity (or for an *organic* entity).

Whitehead's Speculative Scheme identifies with The Categories, which must be understood as an ontological schema that comprises both dynamic and operative principles, and substantial partitions of things within the actual world. In *Process and Reality*, he both theorizes and applies four types of principles or categories: *The Category of the Ultimate*; *eight Categories of Existence*; *twenty-seven Categories of Explanation* and *nine Categorical Obligations*. One of the central concepts for Whitehead is that of 'process' because *the general structure of the process is the foundation for the intimate logical coherence of his speculative scheme*. Synonyms for 'process' are the words 'event' and 'organism', though with metaphysically generalized meanings. Hence, by *process* he refers, broadly speaking, to a unitary development in time of an entity in a physical and mental medium (the principle of 'dipolarity'). Any entity that organically exists, as an event in the world, not just as a thing, has a unitary self-formed identity as a result of an original 'bringing together' of preexisting elements from a medium and by continual development in relation with what it experiences. For the present discussion, important is the Category of the Ultimate which refers to Creativity as the 'principle of novelty'⁶. To articulate this category, Whitehead actually uses three terms: 'Creativity', 'many' and 'one'. First of all, because he thought that nothing can exist in isolation, as an absolute, and this idea made him to conceive a *relational scheme of categories* in accord with an organic/processual view upon reality. Secondly, as the principle of novelty, creativeness cannot exert itself in a void, some other elements being needed. These other elements, within the higher

⁵ In Romania, it was Lucian Blaga who also proposed a cosmology.

⁶ Alfred North Whitehead, *Process and Reality (Gifford Lectures Delivered in the University of Edinburgh During the Session 1927–28)*, Corrected edition, Edited by David Ray Griffin and Donald W. Sherburne, New York, The Free Press, 1985, p. 21.

level of abstraction specific to a cosmology, are simply ‘one’ and ‘many’, namely the fact of constituting a new unity out of a preexisting set of many elements⁷.

This unitary cycle of self-determination that constitutes the process of an actual entity is named by Whitehead ‘concrecence’ and is an application of the old observation of naturalists concerning the whole-part reciprocity, but developed at a higher, (metaphysical), level of generality and grounded in a conceptual framework that has more explanatory potency. Also, the experience Whitehead describes is the basis for what he calls *The Fallacy of Misplaced Concreteness*, namely the confusion specific to Modernity to consider scientific abstract notions as concrete because natural phenomena can be reduced, in some special circumstances, to these abstractions. For example, because ‘water’ is formed by the chemical compound H₂O, then water is, essentially, this chemical compound and any other aspects of water are epiphenomenal. Yet, for Whitehead, ‘concrete’ should be considered, the other way round, experiences, feelings, organic reactions and anything, generally, that has bearing upon one’s subjectivity. The structure of the concrecence is quite opposed to abstractness, being a label for the most intimate phenomena. According to Whitehead, this process has four entwined stages:

1. The DATUM refers to the objective medium (*Umwelt*) in which an entity comes into being, thus (pre)determining the initial conditions for a new organism/actuality. This first element of the concrecence (the emergent, self-generating process of an actual entity) represents the external inheritance that contributes to the possibilities and impossibilities of the new entity.

2. The PROCESS is the core of the concrecence because it encapsulates the individuality, the internal profile of the actual entity, the moment of self-realization and the constitution of its definiteness.

3. The SATISFACTION is the efficient cause of the whole concrecence, being the element through which the actual entity gains both a subjective and a transcendent aim. This aim is the intimate motivation of the growth, evolution and development of the actual entity.

4. The DECISION is the last phase of an actual entity’s life, marking its transition into a datum for future actual entities.

The following paragraph from *Process and Reality* is a brief description of the way these four stages are connected:

‘The settlement which an actual entity ‘finds’ is its datum. It is to be conceived as a limited perspective of the ‘settled’ world provided by the eternal objects concerned. This datum is ‘decided’ by the settled world. It is ‘prehended’ by the new superseding entity. The datum is the objective content of the experience. The decision, providing the datum, is a transference of self-limited appetite; the settled world provides the ‘real potentiality’ that its many

⁷ As can be observed, these descriptions are influenced both by his experience as a mathematician (the relation between ‘one-ness’ and ‘many-ness’ through the functions of ‘conjunction’ and ‘disjunction’), but also by his metaphysical extrapolation of the structure of the ‘organism’. This manner of using mathematical experience is, maybe, unique to Whitehead’s model of creating novel philosophical concepts.

actualities be felt compatibly; and the new concrescence starts from this datum. The perspective is provided by the elimination of incompatibilities. The final stage, 'the decision', is how the actual entity, having attained its individual 'satisfaction', thereby adds a determinate condition to the settlement for the future beyond itself. Thus the 'datum' is the 'decision received' and the 'decision' is the 'decision transmitted'. Between these two decisions, received and transmitted, there lie two stages, 'process' and 'satisfaction'. The datum is indeterminate as regards the final satisfaction. The 'process' is the addition of those elements of feeling whereby these indeterminations are dissolved into determinate linkages attaining the actual unity of an individual actual entity. The actual entity, in becoming itself, also solves the question as to *what* it is to be. Thus, process is the stage in which the creative idea works towards the definition and attainment of a determinate individuality. Process is the growth and attainment of a final end.⁸

'Subjectivity', in a good relation with the common sense of the term, refers to the intimate, personal, inner realm of feelings and experiences an actual entity has during its process of becoming. Still, the entire speculative scheme, the structure of the concrescence, the appeal to organicity, the emphasis made on feelings and concreteness, all contribute to avoiding one of the major (false) problems of Modernity: the difficulty of linking a (thinking) subject with the world. If, from the beginning, one conceives of a metaphysical doctrine in which the 'world' and the 'subject' are related, then the issue appears simply as without justification. It becomes a theoretical problem only when 'mind' and 'matter', 'subject' and 'object', the 'individual' and the 'world', are thought of as separate and without linkage. On the other hand, evolutionism has meaning, relevance, applicability, and grounding only in a reality in which the subject already is in communication with its environment. This suggestion, among others, was philosophically extended by Whitehead, resulting in a cosmological thought that from the beginning solves the problem of relatedness⁹. Hence, this is the reason why, for example, Whitehead also metaphysically extended the notion of 'society'. The Whiteheadian society is any association of actual entities that form some type of connectedness in virtue of some shared values and goals. Again, 'value' does not have only a cultural/anthropological sense; rather, for Whitehead, it is a logical consequence of limitation (physical, mental, metaphysical limitation). The 'nexus' is simply a more complex assemblage of societies, but its structure and principles of functioning are the same as in the simplest society, namely it is based on cooperation. Whitehead affirms that 'there is no element in the universe capable of pure privacy'¹⁰ and this fact is due to the 'experiential togetherness' by which any actual entity organically assimilates elements from other actual entities (forming an 'extensive continuum').

⁸ Alfred North Whitehead, *Process and Reality*, *op. cit.*, p. 150.

⁹ The appeal to cosmology is not a simple intellectual preference, but is a logical necessity derived from the fact that time, change, development, process, creativity, and experience, all exist in *this* actual world, which Whitehead sums up as forming what he calls the 'real potentiality' (as opposed to the 'general potentiality', the metaphysical set of ontological conditioning).

¹⁰ Alfred North Whitehead, *Process and Reality*, *op. cit.*, p. 212.

The datum is embedded in an actual entity and any particular actual entity becomes a ‘superject’, which means that it transcends into a datum for future entities, a lesson learned from nature’s life-death and environmental cycles.

Among the terms used to indicate the reciprocal affect(ion) between an actual entity and its datum/environment is ‘plasticity’. This notion is, in contemporary neurological and philosophical research, widely used¹¹ and it refers to the possibility of the mind to act and react according to external and internal circumstances. Plasticity is a condition for novelty – to use the famous Kantian syntagm, it is a condition of possibility for novelty – and it also presupposes both subjective implication (the unique element) and societal cooperation (the inheritance). In Whitehead’s words from *Adventures of Ideas*: ‘Nature is plastic, although to every prevalent state of mind there corresponds iron nature setting its bounds to life. Modern history begins when Europeans passed into a new phase of understanding which enabled them to introduce new selective agencies, unguessed by older civilizations. It is a false dichotomy to think of Nature *and* Man. Mankind is that factor *in* Nature which exhibits in its most intense form the plasticity of nature. Plasticity is the introduction of novel law’¹², but also in an earlier paragraph from *Science and the Modern World*: ‘(...) The organisms can create their own environment. For this purpose, the single organism is almost helpless. The adequate forces require societies of cooperating organisms. But with such cooperation and in proportion to the effort put forward, the environment has a plasticity which alters the whole ethical aspect of evolution.’¹³

Hence, as a general conclusion to the present essay, the way Whitehead interpreted Charles Darwin’s epochal findings and ideas is not necessarily unexpected, but within the intricacies of his cosmological project they bear a heavier significance. Our conception about subjectivity, nature, life, and even about metaphysics, has been transformed by the understanding we have gained about how organisms coexist, fight, adapt, compete, and thrive together, bound within an environment. Contemporary studies about nature, made from an accepted evolutionist stance, are just applications and exemplifications of more general truths about existence. As a proposal, Whitehead’s cosmology is among the few attempts at metaphysically clarifying these truths.

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¹¹ For example, in Catherine Malabou’s most recent publications on the subject.

¹² Alfred North Whitehead, *Adventures...*, *op. cit.*, p. 78.

¹³ Alfred North Whitehead, *Science and...*, *op.cit.*, p. 111–112.

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