



Universiteit
Leiden
The Netherlands

Bergson and the Aristotelian model of immanent teleology

Cortina, A.

Citation

Cortina, A. (2019, April 11). *Bergson and the Aristotelian model of immanent teleology*. Retrieved from <https://hdl.handle.net/1887/71195>

Version: Not Applicable (or Unknown)

License: [Leiden University Non-exclusive license](#)

Downloaded from: <https://hdl.handle.net/1887/71195>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The following handle holds various files of this Leiden University dissertation:

<http://hdl.handle.net/1887/71195>

Author: Cortina, A.

Title: Bergson and the Aristotelian model of immanent teleology

Issue Date: 2019-04-11

1. The reform of immanent teleology

1.1. Anti-teleological readings of Bergson

In section 1.1, I will deal with two main issues, to be addressed in the following two subsections, 1.1a and 1.1b. First, I want to lay out my overall view of Bergson in comparison with general accounts of his philosophy. I want to emphasize concepts such as substance, function, order and hierarchy in Bergson against the depiction of Bergson's world like a chaotic, blind Heraclitean flux of *pure becoming* or any kind of mysticism. I seek to introduce our topic, teleology, through that general set of traditional concepts. To be sure, Bergson is a philosopher who held a dynamic vision of the world and life, but at the same time he is a philosopher of order, which means directedness. That is, order and dynamism are both part of his philosophy.

Second, I will tackle the main issue: the anti-teleological readings of Bergson. Such interpretations, as already mentioned in the Introduction to this dissertation, consider the pages in which Bergson discusses teleological questions with regard to its method and ontological status. These scholarly readings rely upon concrete passages in EC.I and II. These two chapters are the only texts where Bergson talks about teleology as a philosophical problem. Furthermore, he is there concerned only with global teleology, not individual teleology (as one could find in MM). The anti-teleological interpretations emphasize Bergson's criticism of finalism in EC.I and II. Apart from the relevant readings of these texts, there are two short late Bergsonian texts that have attracted the attention of certain scholars: PR, an article published in 1930, and one important private letter to Floris Delattre, written in 1935. These two texts certainly deserve attention for they contain important claims.

After critically examining the anti-teleological readings, I will address my own interpretation in 1.2. Basically, I do not play down the importance of these critical accounts by Bergson, but I place them within a broader context, the context of a reform of the classical view of teleology. In 1.2 I discuss the textual basis for holding this assertion.

1.1.a. General vision of Bergson: persistence of substances and global hierarchy

It is true that in some parts of Bergson's works can be found statements in which consciousness and the universe are described as "pure becoming", "pure progress" with no direction, substances, or goals.⁴⁵ Bergson uses the metaphor of the river and the flux on several occasions talking about inner consciousness. Apparently, this has given rise to the temptation to interpret his philosophy as a certain kind of modern development of Heraclitus' theory of the universal flux of pure becoming:⁴⁶ indeed, the critical accounts written in the 40's by Bertrand Russell and Garrigou-Lagrange bring up Heraclitus when talking about

⁴⁵ "There are changes, but there are underneath the change no things which change: change has no need of a support. There are movements, but there is no inert or invariable object which moves: movement does not imply a mobile". PM, p. 304. Note 19.

⁴⁶ This interpretation of Heraclitus can be found in Plato (*Cratylus*, 402a). See: "Excursus I: On traditional interpretations of the cosmic cycle", in Kahn, Charles. *The art and thought of Heraclitus. An edition with the fragments with translation and commentary*. Cambridge University Press, 1979, p. 147. See also J. V. Luce, *An introduction to Greek philosophy*. Thames and Hudson, London, 1994.

Bergson.⁴⁷ In fact, this has become a regular assumption. In my opinion, this leads to a misinterpretation of Bergson's view of movement and time. It only emphasizes one aspect of our individual experience of the world and disregards the complete picture.

Bergson was aware of this Heraclitean reading. During his lifetime, namely, in his later years, Bergson publicly rejected the philosophical Heraclitean-flux genealogy.⁴⁸ According to Fruteau de Laclos,⁴⁹ in response to Jacques Maritain's attack in "La philosophie bergsonienne",⁵⁰ Bergson added these words in a footnote to the re-publication of *Introduction to Metaphysics*:

"From the fact that a being is action can one conclude that its existence is evanescent? What more does anyone say than I have said, in making it reside in a "substratum", which has nothing determined about it, since, by hypothesis, its determination, and consequently its essence, is this very action? Does an existence thus conceived ever cease to be present to itself, real duration implying the persistence of the past into the present and the indivisible continuity of an unfolding?"⁵¹

In order to know the possible nature of that "evanescent" existence's doctrine it is necessary to read the subsequent note to the same text. In his later complaint, Bergson completes the earlier one, by attributing the theory to the philosopher Heraclitus:

"Let me insist I am thereby in no way setting aside *substance*. On the contrary, *I affirm the persistence of existences*. And I believe I have facilitated their representation. How was it ever possible to compare this doctrine with the doctrine of Heraclitus?"⁵²

I think this particular case is, actually, illustrative of a certain kind of assumed general vision of Bergsonism, which is still active nowadays. But Bergson had a more moderate conception of being as flux. It is a more dynamic conception of substances and, we saw, a functional conception of that dynamism.⁵³ This functional conception relies on two notions: persistence and action. One could add, action *for the sake of* persistence. Persistence in time means persistence *of* the continuity of the past *in* the present. That is, persistence has to be understood as that which is *for the sake of* existence.

On several occasions, Bergson called this active dynamism "progress". He used the term in his first essay onwards. It became one of his most used *mantras*: "We have to do here not with an object, but with a progress".⁵⁴ He repeated in similar forms that substances should actually be called progresses, since they are continually changing. Thus, our self is a progress

⁴⁷ Russell, Bertrand. Chapter 28. "Bergson" in *The history of Western philosophy*. Routledge, London, 2004, and Garrigou-Lagrange, Réginald. *Le réalisme du principe de finalité*. [El realismo del principio de finalidad] Trans. Joaquín Ferrandis. Desclée de Brouwer, Madrid, 1949. See the First Part, "The being, the becoming and the finality". These two books were published for the first time in 1946 and 1949, respectively.

⁴⁸ On "temporalism" Bergson refers also Heraclitus. Letter of 4 juillet 1911 to Lovejoy. Bergson, Henri. *Écrits philosophiques*, PUF, Paris, 2011, p. 405.

⁴⁹ PM, Notes, 2012, p. 442.

⁵⁰ "La philosophie bergsonienne" published by Jacques Maritain in *Études critiques* in 1913. Apparently, according to Fruteau de Laclos the article appeared in 1903. Notice that Bergson's note was added in 1934. That is, 31 years after. A pretty long period for a response.

⁵¹ Footnote 19. PM, p. 304.

⁵² Footnote 23. PM, p. 304, italics are mine.

⁵³ I take the expression from Lacey. "He [Bergson] seems to want the more moderate flux doctrine that everything is always changing in certain respects—certain definite respects, not just that everything is always changing in at least one respect". Lacey, R. *Bergson*. Routledge, London, 1989, p. 110.

⁵⁴ DI, p. 111.

in constant change. He also describes the tendency of the spirit to move throughout the brain and body for the sake of efficiency as a progress. Individual beings, substances, can also be progress.⁵⁵ And there is in Bergson the idea of common change towards better new stages in life and in cultures. That is the genuine idea of progress.

In DI, when Bergson is talking about the continuum of duration of the human soul, he seems to talk about an a-teleological stream. Especially in DI.II, duration seems to be just a flux of time. However, even there I find one hint of perfectiveness. Among the different features of human consciousness, Bergson emphasizes irreversibility and a tendency toward maturity. This is surely clearer in the third chapter. Only DI.III (the last chapter of the essay) shows what is the goal of this irreversible progress: freedom. Even in DI it can be deduced that maturity and personal growth are meant to be the flourishing point of the process. The idea of pure becoming does not fit in my view with the whole scheme of DI. It is true, on the other hand, that Bergson emphasizes throughout the text, and specially in DI.II, the idea of progress in the sense of pure becoming. Bergson keeps using the term progress in MM, and EC, and DS, for other purposes. In those essays, this term implies efficiency or growth toward some better stage. Progress is most of the times a teleological notion in Bergson.⁵⁶ His dynamic vision of reality does not entail an evanescent flux of pure becoming, but a teleological progress.⁵⁷

In general, progress is a directed movement. Progressive vision of movement presupposes an optimistic vision of natural movements, since progress is meant to be *for the better*. In this sense, progress has to do with the notion of the good, the end, perfection, and completeness. In Bergson there is progress everywhere. Something with no efficiency is unnatural, since being and functioning is the same thing.

In Bergson's view, "that which does nothing is nothing" ("ce qui ne fait rien n'est rien").⁵⁸ Things are not mere objects, static structures. They are constantly changing. They are progressing. This progress has some direction, according to Bergson. This direction is efficacy or function. All throughout Bergson's works, progress goes hand in hand with another concept which is significantly teleological. This concept is that of 'destination'. 'Destination of the body', 'destination of the soul', 'destination of laughter', 'destination of life' are some of his concepts. I examine their meaning in 4.1.

In Bergson we also find a clear hierarchy of beings, suggested by a number of claims in his texts. Despite his many concerns regarding physics, I would say that he was mainly focused on biology and anthropology.⁵⁹ The theory of action and substances has to be understood regarding biological and ethical beings, which are their paradigm. He considered the biological world as a hierarchy: amoebas, humans, dogs, Cambrian animals, wolves, Hymenopterans, carnivorous plants are considered in different degrees from the bottom to the top. So, while they are alive, as an individual or as species, they persist on earth. While they occupy different levels of the general scale, they are more or less perfect. There are thus

⁵⁵ For another approach to Bergson and substances: Waszkinel, Romuald et Hejno, Eugeniusz. "L'inspiration aristotélicienne de la métaphysique de Bergson". *Revue Philosophique de Louvain*. vol. 89, n°82, 1991

⁵⁶ Against my interpretation of progress A. François in Note 12 to the first chapter of EC. EC, 2009, p. 396.

⁵⁷ For the opposite view of "progress" in Bergson, Arnaud François in EC, 2007, note 12, p. 396.

⁵⁸ "In such a doctrine, time is still spoken of: one pronounces the word, but one does not think of the thing. For time is here deprived of efficacy, and if it *does* nothing, it *is* nothing" EC, p. 39.

⁵⁹ I would say that both material elements and artifacts occupy the lower status on that natural scale he held.

different levels of persistence, which Bergson understands in hierarchical terms. Again, there are no evanescent fluxes of pure becoming and nature can be rationalized.

At some point, around 1900, Bergson becomes an evolutionary thinker, but he remained strongly hierarchical in his view of nature. He reintegrates hierarchy together with change or evolution. In historical evolutionary terms, this hierarchy can be found in the progress from plants to animals, and that from animals to humans. In DS he does not believe those humans described at the time as primitives are by nature biologically inferior to modern citizens (and he emphasized that), but he believed that societies or cultures in history should be understood according to the biological scale of perfection. Industrial democracy is ranked on the top of the scale, and the primitive societies reported by Lévy-Bruhl or Durkheim stand at the lowest end. On the other hand, he saw a clear, but peculiar, continuity between the prehistoric hatchets discovered in Moulin-Quignon, in the 19th century, and the machine Newcomen. Each epoch fits into one hierarchical category. Despite his democratic approach to the human being, it is a matter of fact that he establishes a sharp natural distinction among humans: on one hand, there is the regular human, on the other, the spiritual genius. His anthropology and sociology cannot be understood without this distinction. It seems to me that he inherited it from his milieu in that century. Socrates, Christ, Jean of Arch, Shakespeare, San Juan de la Cruz or Rousseau all have by nature a specific task to fulfill within societies: they create the future and we, regular people, imitate them. This is Bergson's historical view, according to which the genius creates newness, we transform it in habit, and ultimately the newness is lost again.

On one hand, we have seen that, for Bergson, everything has a specific action, and there is a plurality of actions. On the other hand, there is a hierarchy of those active beings. This means both that all living beings are meant to fulfill some function and that there is a scale of activities and living beings.

1.1.b. Bergson criticizes finalism

With the foregoing in mind, I will now highlight Bergson's critiques of finalism. Afterwards, I will address the scholarly commentaries on Bergson. They are representative of the usual reading of Bergson regarding this topic. Since the discussion of teleology appears exclusively in EC.I and II, his position and the commentaries are addressed exclusively to transgressive global teleology and not conservative individual teleology. This is important, since only one part of my claims have been discussed openly by Bergson and, subsequently, his commentators. Note that my interpretation in 1.1 and 1.2 regarding the idea of critique and reform of finalism has to be addressed to global transgressive teleology, and not to conservative teleology. I claim that Bergson also was a reformer of the latter, and as far as I can tell, other commentators haven't held this opinion.

In 1.1 and 1.2, global transgressive teleology—or, in other words, the *élan vital*—will attract almost all our attention, given its importance for the usual interpretations of Bergson in this regard, which is the focus of this section. The concrete context is thus exclusively global teleology and evolution.

The question is whether the *élan vital* is a version of finalism or whether it is ultimately incompatible with finalism. According to a number of scholars in EC.I and II, Bergson rejects finalism, in the name of his own position. There, Bergson criticizes modern mechanism and any type of finalism or teleology. These scholars hold that Bergson's position stands

equidistantly from the positions of philosophical mechanism (his lifelong enemy) and global finalism, a *masked* global mechanism. On this view, Bergson's views are just alien to teleology. For Bergson, as Jankélévich points out, finalism is an "insincere defender of life".⁶⁰ General accounts agree on this, such as Jankélévich's, Troitignon's, or more recently Pearson's. According to them, the Bergsonian vision of evolution is just *different* from global teleology. Bergson's vital impulse is just Bergsonism, an original point of view, and the two other "isms" are *equally alien* to it. Even the title of the first chapter of the text leads us to think that this is correct: "The Evolution of Life: Mechanism and Finalism". This "and" is thus a geometrical midterm.

Thus, the label "finalism" cannot be applied to the author of EC. Therefore, Bergson's idea of *élan vital* or of psychological agency among insects in EC.II have then *nothing to do* with matter, atoms and inertial causal laws (mechanism). *Equally*, they have *nothing to do* with perfectiveness, general progress and the analogy between human consciousness and natural entities (teleology). Life, then, is sheer spontaneity with neither direction nor order. *Directedness is not compatible with freedom and contingency*. Moreover, Bergson's method has nothing to do with finalism, and it is just his own method, based on *intuition* and *sympathy*. Such are the upshots of this interpretation.

In my view, this frequent interpretation of the book is not just obscure, but inconsistent. It is rooted in Bergson's eventual ambivalence regarding the topic.⁶¹ In light of this, I will now check the precise texts in which Bergson attacks finalism or teleology and I will address his claims.

- Critique of fatalism.

The main passage on the topic of fatalism is the following. If everything is directed towards something, then there is no room in nature for contingency and, thus, for human freedom.

"Finalism *thus understood* is only *inverted mechanism*. It springs from the same *postulate*, with this sole difference, that in the movement of our finite intellects along successive things, whose successiveness is reduced to a mere appearance, it holds in front of us the light with which it claims to guide us, instead of putting it behind. *It substitutes the attraction of the future for the impulsion of the past*" (EC, pp. 37-38, italics are mine).

EC was published in the years of the "eclipse of Darwinism".⁶² Primarily, the book attacks the positivist and scientific conception of life itself and evolution: i.e., mechanism. According to Spencer, who represents the "false evolutionism"⁶³, Charles Darwin and Thomas Huxley conceive living beings as mechanisms, that is, part of a great mechanism, composed by matter. Bergson says:

"But if there is nothing unforeseen, no invention or creation in the universe, time is useless again. As in the mechanistic hypothesis, here again it is supposed that *all is given*".⁶⁴

⁶⁰ Jankélévich, Vladimir. *Henri Bergson*. PUF, Paris, 2008, p. 133.

⁶¹ Lacey, R. *Bergson*. Op. cit, p. 183.

⁶² Bowler, Peter. *The eclipse of Darwinism: anti-Darwinian evolution theories in the decades around 1900*. Baltimore: Johns Hopkins, 2006.

⁶³ EC, p.xiii.

⁶⁴ EC, pp. 37-38.

“All is given” is the mechanistic “postulate” referred to in the previous text above. The philosophers and biologists, in Bergson’s opinion, conceive living beings as physical matter. That is, an elementary substance, decomposable into atoms, moved basically by inertial forces of causality. This point of view posits a continual passivity in the cosmos and, in Bergson’s opinion, also denies the possibility of *real change*. Everything is predesigned in the constitution of matter, so change does not actually occur. Therefore, thanks to this view, we humans tend to disregard the immediate data of our life: the pure progress or pure change of the deep self. The mechanistic view clashes with human consciousness, and the problem of change is close to the problem of freedom. The “all is given” assumption leads to serious problems according to Bergson. Quite temerarily, I would say, Bergson extends the “all is given” point of view to philosophers of evolution and also mere biologists of different kinds.

At this point, one might ask where exactly Darwin says that the cosmos is matter in which all is given, and that every living being is a mechanism. Very opportunely, Bergson finds a quotation by the Darwinian Thomas Huxley, sometimes known as “Darwin’s bulldog”:

“If the fundamental proposition of evolution is true, that the entire world, living and not living, is the result of the mutual interaction, according to definite laws, of the forces possessed by the molecules of which the primitive nebosity of the universe was composed, it is no less certain that the existing world lay, potentially, in the cosmic vapor, and that a *sufficient intellect* could, from a knowledge of the properties of the molecules of that vapor, have predicted, say the state of the Fauna of Great Britain in 1869, with as much certainty as one can say what will happen to the vapor of the breath in a cold winter’s day”.⁶⁵

According to Bergson, the mentioned “sufficient intellect” is a 19th century version of “Laplace’s demon”.⁶⁶ The demon is, in Bergson’s insight, the great paradigm, moreover the *myth* of science. Laplace’s demon is “a superhuman intellect [that] could calculate, for any moment of time, the position of any point of the system in space. And as there is nothing more in the form of the whole than the arrangement of its parts, the future forms of the system are theoretically visible in its present configuration”.⁶⁷ By this “sufficient intellect”, Huxley is then included in the lineage of philosophers of mechanicism, which ultimately includes the various classical approaches to evolution, Spencer and Darwin among them.

In Bergson’s opinion, positivism and science tend to think that the “... living body might be treated by some superhuman calculator in the same mathematical way as our solar system, this has gradually arisen from a metaphysic which has taken a more precise form since the physical discoveries of Galileo”.⁶⁸ Thus, Bergson holds that the mechanistic view leads to fatalism. Evolutionary theories are, in general, mechanistic. Evolutionary biologists such as Huxley and evolutionary philosophers such as Spencer tend to elaborate a fatalist doctrine. Bergson considers it a “false evolutionism”.

Up until now, we have seen the context of EC. With regard to his criticism of teleology, on the other hand, Bergson holds that it can lead to fatalism. General teleology, considered as a

⁶⁵ EC, p. 38, italics are mine.

⁶⁶ Notice that the historian of biology Sober considers that Darwin can also be related to Laplace’s deterministic paradigm. Sober, Elliot. “Metaphysical and epistemological issues” in *The Cambridge Companion to Darwin*. Ed. Jonathan Hodge and Gregory Radick, Cambridge, pp. 269-270.

⁶⁷ EC, p. 7.

⁶⁸ EC, p. 20.

cosmic program of God, is what Bergson considers “radical teleology” and it is represented by Leibniz, who, in Bergson’s opinion, did not make room for real freedom.⁶⁹

If we go back to the first quotation of the section, a quotation underlined by many scholars, we see that he is exclusively referring to teleology qua fatalism. As we saw, Bergson writes: “Finalism *thus understood* is only inverted mechanism”. He is actually referring to the sentences immediately preceding that one:

“(…) radical finalism is quite as unacceptable [as mechanism], and for the same reason. The doctrine of teleology, *in its extreme form*, as we find it in Leibniz for example, implies that things and beings merely realize a program previously arranged. But if there is nothing unforeseen, no invention or creation in the universe, time is useless again. As in the mechanistic hypothesis, here again it is supposed that *all is given*”.⁷⁰

The lineage of thinkers who endorse the “all is given” claim becomes even broader now: Leibniz-Laplace-Spencer-Darwin-Huxley. Before Laplace, we had fatalist theology. Afterwards we have fatalist biology. Huxley represents the mechanistic view of the universe, in which all is given. Leibniz represents the finalistic account of the universe in which all is given. Huxley inverts Leibniz’s attraction to some already finished program, made by god, with the impulsion of a material world, devoid of god.

Leibniz’s finalism, “thus understood”, is, as we have seen, an “extreme form” of finalism. The “inverted mechanism” label is regularly stressed by Bergson’s commentators, but it is clearly applied to Leibniz, in the framework of an extrinsic and transcendent vision of teleology. Finalism is not *always* “inverted mechanism” but only “*thus understood*”. Bergson is here referring to Leibnizian nature understood as a “plan of god”.

This is the main feature for Bergson’s most common anti-teleologist characterization. According to this scholarly reading, in Bergson there are not natural goals, since they constrain real becoming, since they imply that all is given. In my view this doesn’t prove anything other than the fact that Bergson rejects extrinsic teleology, whereby God governs the world by imposing a rigid order on the material becoming.

This shows that Bergson, like Aristotle, does not believe in a providential teleology, but in an immanent one. This also shows that in Bergson’s interpretation, there is a philosophical genealogy that roots materialism within mechanical theology. Leibniz’s theological vision leads to fatalism. Equally, Spencer’s materialistic account of evolution leads to fatalism. Between them there is Laplace, who is the founder of the myth of science: the demon. Laplace’s demon, naturally, leads to fatalism. Thus, *if* teleology leads to fatalism, *then* it is indeed a reverted mechanism.

Throughout his works, fatalism is the main focus of his worries, even at the very beginning of his work.⁷¹ Bergson’s main concern is to distinguish the general tendency toward perfection that he calls *élan vital* from fatalism. Bergson considers that teleology, understood as providentialist philosophical fatalism, has “humiliated” mankind. He says this in a short text called “The possible and the real”, which deals again with the topic of global teleology:

⁶⁹ Bergson offered previously one more nuanced view of Leibniz and teleology in 7th and 14th of April, in 1905. Bergson, Henri. *L’évolution du problème de la liberté. Course au Collège de France 1904-1905*. PUF, Paris, 2017.

⁷⁰ EC, p. 39. The first emphasis is mine.

⁷¹ EL.

“Humbled heretofore in an attitude of obedience, slaves of certain vaguely-felt natural necessities, we shall once more stand erect, masters associated with a greater Master”.⁷²

- Critique of anthropomorphism

In EC we also have a critique of the finalistic method. It consists in extrapolating structural features from the intentional and rational mind to unconscious nature. Bergson is then criticizing “finalism” as an illusion based on our intellectual experience of nature. The name Leibniz is not mentioned here and it seems that this criticism can be applied to many finalist philosophers apart from Leibniz. Bergson is criticizing the finalist’s method: anthropomorphism.

“The error of radical finalism, as also that of radical mechanism, is *to extend too far the application of certain concepts that are natural to our intellect*. Originally, we think only in order to act. Our intellect has been cast in the mold of action. Speculation is a luxury, while action is a necessity. Now, in order to act, we begin by proposing an end; we make a plan, then we go on to the detail of the mechanism which will bring it to pass. This latter operation is possible only if we know what we can reckon on. We must therefore have managed to extract resemblances from nature, which enable us to anticipate the future. (...) We are born artisans as we are born geometricians, and indeed we are geometricians only because we are artisans. Thus the human intellect, inasmuch as it is fashioned for the needs of human action, is an intellect which proceeds at the same time by intention and by calculation, *by adapting means to ends and by thinking out mechanisms of more and more geometrical form*. Whether nature be conceived as an immense machine regulated by mathematical laws, or as the realization of a plan, these two ways of regarding it are only the consummation of two tendencies of mind which are complementary to each other, and which have their origin in the same vital necessities. For that reason, radical finalism is very near radical mechanism on many points. Both doctrines are reluctant to see in the course of things generally, or even simply in the development of life, an unforeseeable creation of form”.⁷³

This passage is to be understood as complementary to the previous one. It can be conceived as a confirmation of the first critique regarding fatalism. In short, the analogical method leads to fatalism. Our need to foresee, our project of controlling the environment, is the origin of the problematic assumptions. The text shows the empirical basis of the illusion of finalism.

We can ask, then, whether Bergson is against the extrapolation of mind to nature. We can wonder whether Bergson, like other philosophers, thought that the analogy between humans and the natural world is illegitimate. This rejection cannot be possible. This is obvious, since Bergson constantly proposes the analogy between the human mind and life. He even talks about consciousness and consciousness in general. “The first chapter [of EC] it is structured around a vast analogy” says Arnaud François.⁷⁴ I believe that is the case. The book would not propose to criticize analogies in general then. The critique consists in two ideas.

First, the difference stated in the text between luxury and necessity has to be considered. That is the sense of the two sorts of teleology I will develop. The artisan, the geometer, and the intellect are linked together as adaptation, and adaptation is necessity and action. That is one kind of progress. The structural basis of the technician, the thinker, and the adapted are basically the same type of tendency. On the contrary, speculation, luxury and the “unforeseeable creation of form” are left aside. They seem to be apart from action itself. They

⁷² PM, pp. 123-124.

⁷³ EC, 44-45, italics are mine.

⁷⁴ François, Arnaud. “Commentaire”, *L'évolution créatrice. Études & Commentaires*. Ed. A. François. Vrin, Paris, 2010, p. 17.

seem not to be needed for the sake of adaptation, they are better understood as a surplus. We can see here two types of conscious experience: one is derived from action and the other is not.

At the same time, there is in EC a critique of a certain kind of anthropomorphism, related to “radical finalism”, although the method described could fit well within different kinds of finalist methods. But the possibility of establishing analogies between consciousness and nature can’t be attacked, since the whole book relies upon a vast analogy. I will show examples of this in 3.1.

Here Bergson is saying that the “unforeseeable creation of form” and the work of an artisan are *not* the same thing. Also, he is saying that if there is luxury in nature, it is not for the sake of adaptation. The analogy does not grasp the central aspect of creation. Thus, in this text, Bergson is *restricting the use of the analogy*. If we read the passage closely we can conclude that he is merely saying that nature, understood as a whole, does not function according to intellectual and technical plans. He is saying that not *every analogy* is correct.

Analogy can be used, but they cannot be used ever. Thus, Bergson believes that finalism can be rigorous but is a matter of fact that *many times* is not.

Fatalism and anthropomorphism are just examples of a *dysfunctional* finalism. The first one constrains the real immanent change in nature. The second proposes an incorrect analogy between mind and nature. I think this idea is well expressed in this text:

“But, if the evolution of life is something other than a series of adaptations to accidental circumstances [mechanism], so also it is not the realization of a plan [finalism]. A plan is given in advance. It is represented, or at least representable, before its realization. The complete execution of it may be put off to a distant future, or even indefinitely; but the idea is none the less formulable at the present time, in terms actually given. If, on the contrary, evolution is a creation unceasingly renewed, it creates, as it goes on, not only the forms of life, but the ideas that will enable the intellect to understand it, the terms which will serve to express it. That is to say that its future overflows its present, and can not be sketched out therein in an idea”.⁷⁵

The previous passages came from the first chapter of EC; in the subsequent excerpts the notion of “radical finalism” has disappeared. In EC.II, entitled “The divergent directions of the evolution of life, torpor, intelligence, instinct” Bergson talks plainly about “finalism”. Bergson’s criticism becomes more extended, it seems. One can think whether the second approach does or does not look like an exclusive reference to “radical finalism”. It seems that the critique has expanded to any kind of finalism. It is difficult, however, to specify whom exactly Bergson is referring to in the previous passages, as well as the following ones. He seems, again, to be comparing finalism to mechanism. For example:

“This favor the finalists consider as dispensed to them all at once, by the final cause; the mechanists claim to obtain it little by little, by the effect of natural selection”.⁷⁶

Thus, as I said, he seems to still be referring exclusively to Leibniz, although the term does not include the adjective “radical”.

⁷⁵ EC, p. 103.

⁷⁶ EC, p. 95.

- Critique of the illusion of harmony

In the above passage on the “plan”, Bergson talks about the delusional analogy of extrapolating rational characteristics to nature as a whole. Nature is not intelligent and, therefore, it has no plans. Saying that it has plans would be anthropomorphism and Bergson would not support it. “There is the first error of finalism,” he says. “It involves another, yet more serious.”⁷⁷ This *seriousness* comes from the vision of nature we should have if we considered nature as an intelligent designer.

I will divide the text into three parts. In the first part, Bergson raises an empirical critique of the idea of ‘plan’.

“If life realizes a plan, it ought to manifest a *greater harmony* the further it advances, just as the house shows better and better the idea of the architect as stone is set upon stone. If, on the contrary, the unity of life is to be found solely in the impetus that pushes it along the road of time, the harmony is not in front, but behind”.⁷⁸

Surely still thinking about Leibniz, Bergson states that there is no manifestation of harmony in nature. He is not talking now about adaptation, but about evolution. The history of evolution is something disordered. At the same time, he concedes a sort of unity. Every living being is part of that unity. Thus, life, considered as a unity, is one substance composed of many parts.

There is not an ordered tendency in evolution. Harmony is thus related to that original oneness. The tendency of the process is not harmonious in itself, since there is no “greater harmony the further it advances”. Here he elaborates on this idea.

“The unity is derived from a *vis a tergo*: it is given at the start as an impulsion, not placed at the end as an attraction. In communicating itself, the impetus splits up more and more. Life, in proportion to its progress, is scattered in manifestations which undoubtedly owe to their common origin the fact that they are *complementary* to each other in certain aspects, but which are none the less mutually incompatible and *antagonistic*. *So the discord between species will go on increasing*. Indeed, we have as yet only indicated the essential cause of it. We have supposed, for the sake of simplicity, that each species received the impulsion in order to pass it on to others, and that, in every direction in which life evolves, the propagation is in a straight line. But, as *a matter of fact*, there are species which are arrested; there are some that retrogress. *Evolution is not only a movement forward*; in many cases we observe a marking-time, and still more often a deviation or turning back. It must be so, as we shall show further on, and the same causes that divide the evolution movement often cause life to be diverted from itself, hypnotized by the form it has just brought forth. Thence results an increasing disorder”.⁷⁹

Thus, “complementarity” is *the finalistic feature*. Antagonism is the *non-finalistic* one. According to Bergson, harmony is not the essential element in evolution, but, on the contrary, disorder is. There is, in Bergson’s opinion, an “increasing disorder” in spite of the important deal of complementarity. For this author that is a matter of fact. Apart from that, there is something important and new in Bergson’s insight. The idea of divergence, later called “dichotomy” in DS. Bergson writes in this text: “the same causes that divide the evolution movement often cause life to be diverted from itself, hypnotized by the form it has just

⁷⁷ EC, p. 103.

⁷⁸ EC, p. 103, italics are mine.

⁷⁹ EC, p. 104-105.

brought forth”. This means that there is a plurality, and new goals arise. There is, then, no one line of evolution or “unilinearity”. Evolution itself is a tree of divergent branches. The involution of certain species is a “matter of fact” and the “deviation” of certain branches from the tendency towards perfection is something, he claims, we can “observe”. That is said as something discovered by science, something undeniable in 1900’s. Further on he also claims:

“But one of the clearest results of biology has been to show that evolution has taken place along divergent lines”.⁸⁰

We now reach an important section. In this long passage, the author nuances his general idea regarding evolution:

“The philosopher, who begins by laying down as a principle that each detail is connected with some *general plan of the whole*, goes from one disappointment to another as soon as he comes to *examine the facts*; and, as he had put everything in the same rank, he finds that, as the result of not allowing for accident, he must regard everything as accidental. For accident, then, an allowance must first be made, and a very liberal allowance. We must recognize that *all* is not coherent in nature. By so doing, we shall be led to ascertain the centers around which the incoherence crystallizes. This crystallization itself will clarify the rest; the main directions will appear, in which life is moving whilst developing the original impulse. True, we shall not witness the detailed accomplishment of a plan. *Nature is more and better than a plan in course of realization. A plan is a term assigned to a labor: it closes the future whose form it indicates.* Before the evolution of life, on the contrary, the portals of the future remain wide open. It is a creation that goes on for ever in virtue of an initial movement. *This movement constitutes the unity of the organized world—a prolific unity, of an infinite richness, superior to any that the intellect could dream of, for the intellect is only one of its aspects or products*”.⁸¹

The “facts”, he claims, just deny the idea of a general plan. At the same time, there is an original impulsion or progress. Progress implies perfection. Since it is original, we can say it is natural. There is a natural tendency towards perfection. But its model is not the plan-model.

“Nature”, I quoted “is more and better than a plan in course of realization. A plan is a term assigned to a labor: it closes the future whose form it indicates. Before the evolution of life, on the contrary, the portals of the future remain wide open”. In my opinion, here Bergson is saying that intellect imitates nature. In addition, he is implying that every analogy between mind and nature may not work. It is a matter of perfection. The goal directed activity of the artisan is not the most perfect feature of humans. This means that the teleological model is *not sufficiently perfect*. “Nature is more and better than a plan in course of realization”. This affirms that we should use another model according to its perfection.

He also thinks that there is something such as wholeness. But his problem is that harmony is not the term to express it. There is unity, in his view, but not harmony. He talks about the tendency towards perfection, about progress. “This movement constitutes the unity of the organized world”.

These passages give a name to fatalism and anthropomorphism regarding evolution: retrospective illusion. They also construct a sort of Bergsonian positive theory around some data from science. The origin of life and its divergence—that is, the Darwinian “tree of

⁸⁰ EC, p. 174.

⁸¹ EC, pp. 104-105.

life”—confronts global teleology. This “general form” of evolution in time shouldn’t be considered harmony.

Regarding Bergson’s criticism, it is important to recall two other important texts, dealt with on occasion by commentators. They deal with the same questions as EC.I and II, but in short extension.

- The possible and the “freedom of the world”

First, there is the article “The possible and the real”, in PM. In this text, the “possible” is, so to speak, the future form of the “real”, and according to Bergson the concept of the possible is an “illusion”. In his view, philosophers have privileged the “future” over the present. That turns back into the question of teleology, prediction, and the lack of freedom. Although in the text he talks about personal freedom, he finally reaches the question of global evolution. Over one paragraph he addresses same question of EC.I and II.

“If we put the possible back into its proper place, evolution becomes something quite different from the realisation of a program: *the gates of the future open wide*; freedom is offered an unlimited field. The fault of those doctrines, rare indeed in the history of philosophy, which have succeeded in leaving room for indetermination and freedom *in the world*, is to have failed to see what their affirmation implied. When they spoke of indetermination, of freedom, they meant by indetermination *a competition between possibles*, by freedom a choice between possibles, as if possibility was not *created by freedom itself*! As if any other hypothesis, by affirming an ideal pre-existence of the possible to the real, did not reduce the new to a mere rearrangement of former elements! As if it were not thus to be led sooner or later to regard that rearrangement as calculable and foreseeable! By accepting the premiss of the contrary theory one was letting the enemy in. We must resign ourselves to the inevitable: *it is the real which makes itself possible, and not the possible which becomes real*”.⁸²

Fatalism, from 1.1.b.1, is found here, as is the illusion, 1.1.b.3, and the idea of contingency, implied in divergence. The future has to be “open”. The implied assumption is this: the future has to be open, for human beings are free.

- Between Lamarck and Darwin

In his non-teleological account of EC.I and II, Pearson recalls one letter from Bergson to F. Delattre. It dates back to December 1935, so almost 30 years after the publication of EC. Bergson responds to a letter by Delattre in which EC’s *élan* is compared with the “life-force” of the anti-Darwinian Samuel Butler. This force is an impetus that works teleologically throughout evolution. Butler is then understood as a follower of global teleology. Bergson denies sharply the kinship between his notion of “*élan vital*” and Butler’s “life-force”: “... Butler (...) denies Darwin’s position and supports Lamarck’s one. But to do philosophy is to create the position of the problem and to create the solution”.⁸³

Lamarck is here understood as a finalist author. Darwin, according to this distinction, is understood as a mechanistic author. So, Lamarck is situated beside Butler, for both describe nature, and, namely, biology, as a spontaneous tendency towards perfection. Contrarily, Darwin is conceived as a materialistic author, according to which everything is inertia and

⁸² PR, in PM, p. 122, italics are mine.

⁸³ Bergson, Henri. *Mélanges*, PUF, Paris, 1972, p. 1528.

causality. In this text, Bergson seems to affirm that his global account of Life is alien to both mechanism and finalism *equally*. This may reinforce the main anti-teleological reading.

When Bergson refers to mechanism and finalism he affirms:

“I don’t accept both of these points of view, which correspond to concepts made by human spirit not for the sake of an explanation of life. One has to place somewhere between the two concepts. How can determinate the place?”⁸⁴

This letter also gives a response to this “place”:

“... if there is finality in evolution, it is not in the sense that the philosophical tradition has given to the word ‘teleology’, but in a different and *new sense*, that biology and philosophy have to create, none of the ancient concepts can define it”.⁸⁵

This last passage is relevant for us. We have a word (“teleology”) and we have a “new sense”. Scientific biology has to give the data to philosophy and philosophy has to erect the doctrine. Also, we have the word “if”, at the beginning. The ancient notion of finalism or teleology is not useful.

- Scholarly interpretations

Based on these passages, the so-called regular reading concludes that for Bergson “finalism is not an alternative to mechanism, but only its inverted image”.⁸⁶ This idea of the inverted or reverted mechanism is conclusive for the anti-teleological reading of Bergson.

The book “Responses to evolution”, written by M. Vaughan, K-A Pearson and P. A. Miquel, is representative of this position. In their vision, EC.I and II, Bergson *rejects* “both mechanism and finalism”.⁸⁷ And when it comes to the moment in EC in which Bergson talks about the “signification” of evolution, he is not, they affirm, “reintroducing teleology or anthropomorphism”.⁸⁸ Shortly afterwards, they said that Bergson “is not reintroducing teleology when he locates man as the ‘end’ of evolution”.⁸⁹ In their view, “exigency of creation”⁹⁰ is that which moves the vital global impulse. It is strictly unpredictable, and, thus, the place of man in the cosmos is due sheerly to a-teleological creation. For these authors teleology implies anthropomorphism and anthropocentrism.

The non-teleological contemporary readers defend the view that in Bergson’s vision of biological evolution there is neither global teleology nor historical progress since every

⁸⁴ Ibid., p. 1526.

⁸⁵ Ibid., p. 1524.

⁸⁶ Marrati, Paola. “Time, life, concepts: the newness of Bergson”. Vol. 120. n°5. The John Hopkins University Press, 2005, p. 1105.

⁸⁷ Vaughan, M, Pearson KA and Miquel, P-A. “Responses to evolution”. *Bergsonism, phenomenology and responses to modern science*. Ed. Keith-Ansell Pearson and Alan Schrift. Routledge, London, 2010, p. 354

⁸⁸ Ibid., p. 360.

⁸⁹ Ibid., p. 360.

⁹⁰ Ibid.

process of development is led to divergence in the two branches.⁹¹ I recall 1.1.b.3. This means, again, “refusal of mechanism and finalism”.⁹²

In my vision, none of these insightful readings demonstrate necessarily that, in terms of the global understanding of evolution and the place of the human being in the cosmos, Bergson was not a teleologist. But it is certain that Bergson saw a problem in global teleology and finalism. It is clear that he rejected certain aspects of finalism. As I show in the next section, 1.2, these statements have to be understood in a larger framework.

In the last subsections we have seen that global teleology or finalism was a real philosophical problem from 1907 to 1935, in Bergson’s framework. My claim is that it was part of his approach from much earlier. I would like to recall the only writings specifically devoted to our subject and their conclusions. It is not, however, a large set of publications.

In the 30’s one monograph on finalism and Bergson was published: *La finalité morale dans le bergsonisme*.⁹³ To my knowledge, this is the first and the last monograph on this subject addressing Bergson. It is a book on practical finalism, regarding exclusively human actions in the context of his first book, DI. E. Rolland, the author, states that the theory of freedom developed there is not a theory of freedom, but of spontaneity. That is, morals and virtues are not the concern here, but unpredictability or indetermination.⁹⁴ Rolland considers that the Bergsonian position is a kind of finalism that pretends to situate itself halfway between the “traditional integral finalism” and the “materializing mechanism”,⁹⁵ although Bergson stays closer to finalism.

I agree with this interpretation: Bergson keeps himself close enough to finalism in its basic conception of teleology in ethics. There is a eudaimonist context at stake and also irreversibility, which composes with freedom a perfectivist schema of human life. But none of these claims are openly stated. These are hints of what Bergson’s philosophy of nature, on analogies and functions, is going to be.

In the approach of DI ideas such as pure becoming and no teleological progress are more stressed than that of function, perfection or analogy. In short, his naturalistic approach is still to come in 1889. Rolland’s notes, however, that although Bergson does not mention Aristotle, he is an author towards whom Bergson “reacts” in his own theory of duration.⁹⁶ Although this approach is the only one that devotes a long extension to the subject, it remains inconclusive to me and I do not follow it. In my view, the moment in which Bergson starts to elaborate a teleology is when he starts a philosophy of nature, beyond his early phenomenological approach.

⁹¹“tendance est dissociée en deux, une tendance vers e bas et une tendance vers le haut, conscience et matière (...) aucune tendance jamais n’aboutira à sa fin”: “Créativité comme tendancialité”. Vollet, Matthias in *Bergson*, Ed. Camille Riquier. Cerf, Paris, 2012, p. 371.

⁹²“tendance est dissociée en deux, une tendance vers e bas et une tendance vers le haut, conscience et matière (...) aucune tendance jamais n’aboutira à sa fin”. Ibid, p. 371.

⁹³ Rolland, E. *La finalité morale dans le bergsonisme*. Gabriel Beauchesne et ses fils, Paris, 1937.

⁹⁴ Rolland, E. Op. cit., p. 145. The translation is mine. Also: *Bergson*, Soulez, Philippe and Worms, Frédéric. PUF, Paris, 2002, pp. 206-207.

⁹⁵Ibid., p. 27, and also p. 37: “c’est en réaction consciente contre la tendance aristotelicienne que c’est constitué le point de vue métaphysique de Bergson”.

⁹⁶ Ibid., p. 37: “c’est en réaction consciente contre la tendance aristotelicienne que s’est constitué le point de vue métaphysique de Bergson”.

As far as I am concerned, there are four published texts entirely focused on the question of natural finalism in Bergson. The four of them are exclusively focused on the first chapter of EC. That is, albeit focused on natural teleology in Bergson, these texts do not consider MM or LR as containing teleological approaches. DS is neither included in the analysis. These papers comment on Bergson's account of global evolutionary finalism.

The oldest of the articles I know about finalism and Bergson was written by Cunningham⁹⁷. It has to be said that it is not really a scholarly approach, but a polemic paper, published shortly after the publication of EC. The author denies the idea of creative evolution and, against it, defends a creative finalism. The latter is, in my opinion, closer to Bergson's opinion than Cunningham himself thinks.⁹⁸

Apart from this, two scholars have published three contributions to the topic recently. All of them are focused on the global evolutionary teleology, that is, on the *élan vital*. Pearson has written exclusively about this topic in two separate places,⁹⁹ and the third one has been written by Montebello.¹⁰⁰

Pearson considers that "in exposing the limits of mechanism Bergson does not go on to embrace a finalist position. He argues that finalism is merely an inverted mechanism that also reduces time to a process of realization".¹⁰¹ We have discussed the textual basis for such a claim just now. In this sense, Pearson follows a general assumption. Both, mechanism and finalism, are situated as extremes to the central position of Bergson. Both imply fatalism, an all-is-given world.

But some lines after, Pearson says "the only notion of finality Bergson will permit, *contra* Leibniz and Kant, is a strictly *external* finality".¹⁰² This is new for us. It means that "nature exists neither purely internal finality nor absolutely distinct individuality".¹⁰³ So, everything is coordinated but does not tend toward any pre-programmed goal. "The directionality and movement of life are not, however, to be understood in terms of a simple mechanical realization of pre-existing goals".¹⁰⁴ There are natural and non-mechanical tendencies for Bergson. These tendencies are external in one sense: they involve more than individuals. These tendencies go throughout groups of individuals. One can talk about Life emerging from individuals, according to this assumption.

⁹⁷Cunningham, G. W. "Bergson's conception of finality". *Philosophical Review* 23 (6), 1914.

⁹⁸ Against Bergson, Cunningham defends a "creative finalism", *Ibid.*, p. 662. There he is defending what I think we can really find in Bergson's account.

⁹⁹ Pearson, Keith-Ansell. "Bergson and creative evolution/involution: Exposing the transcendental illusion of organismic life" in *The new Bergson*. Ed. John Mullarkey. Manchester University Press, 1999 and "Chapter 3. Duration and evolution: the time of life" and "Chapter 5. The *élan vital* as an image of thought: Bergson and Kant on finality" in *Philosophy and the adventure of the virtual. Bergson and the time of life*. Routledge, London, 2002.

¹⁰⁰ Montebello. "La question du finalisme dans le premier chapitre de *L'évolution créatrice*" dans *Disseminations de L'évolution créatrice*. Ed. Shin Abiko, Isashi Fujita and Naoki Sugiyama. Hildesheim: G. Olms, 2012.

¹⁰¹ Pearson, Keith-Ansell. *Philosophy and the adventure of the virtual. Bergson and the time of life*. Op. cit., p. 80.

¹⁰² *Ibid.*

¹⁰³ *Ibid.*, p. 89.

¹⁰⁴ *Ibid.*, p. 80.

Pearson also refers to divergence in nature: “The evolution of life becomes intelligible when it is viewed in terms of the continuation of this impetus that has split up into divergent lines”,¹⁰⁵ and the idea of a “common impulsion, not common aspiration”.¹⁰⁶

If I have understood correctly, in Pearson’s view, the *élan vital* is a Kantian reflexive judgment. But against Kant, Bergson does not consider individual beings but Life in general. According to Pearson, the *élan vital* is a hypothesis of Life in general. By using an important statement, taken from a letter of 1835 to F. Delattre, Pearson considers the *élan* not a vitalistic Butlerian “life-force”, but a reflexive judgment or a sort of progress *as if*: the *élan* is an “image of thought”.¹⁰⁷

In Pearson’s view there is an “irreducible pluralism”¹⁰⁸ in nature and biology, so every hypothesis is just a hypothesis, and there are no trends which, so to speak, lead Life’s path through matter.

Pearson thinks that: “In Bergson’s model no dominant tendency within evolution can be identified”.¹⁰⁹ Pearson thinks that divergence of trends and contingency of the tendencies means just creation with no goal. And granting that, *if* there is no “dominant tendency” in evolution, all my claims about Bergson’s global teleology have to be dismissed. On the other hand, it is difficult for me to understand that “the only notion of finality” Bergson permits is “external finality”,¹¹⁰ whereas in the end, according to the same writing, there is no finality at all.

Montebello’s account also gives importance to the idea of external finalism, but he does not question that Bergson’s vision is realistic. The Kantian link is absent here. In Montebello, Bergson’s external finalism is real, constitutive and not reflexive.

The idea of complementariness in nature is emphasized in this account. Montebello stresses the unpredictability as an essential element of the Bergsonian conception of nature. Any kind of pre-programmed end in nature is an illusion, for the sake of unpredictability. Montebello says: “In Bergson the surprising double acceptance of a real finalism and external becomes a double rejection of intellectual finalism. The first type is translated to our living participation in the movement of life conceived as a whole, while the two other types of finalism translate a limitation of our life regarding an internal monadic life or its projection as an end of a planified general life”.¹¹¹ As Montebello affirms rightly, neither monads nor intellectual plans should be considered in Bergson’s framework. By admitting a real non-reflexive external drive Montebello may have admitted a certain general tendency towards something in nature. He does not clarify that, though. He merely stresses the element of commonality in Bergson’s vision of nature: everything is linked. This is *only one part* of what Bergson says.

I agree with Montebello in regard to these remarks, since I also think that Bergson’s vision of teleology is not reflexive, but realistic. It is not individual or monadic, but external. It is not

¹⁰⁵ Ibid., p. 81.

¹⁰⁶ Ibid., p. 94.

¹⁰⁷ Ibid., pp. 135-137.

¹⁰⁸ Ibid., p. 95.

¹⁰⁹ Ibid., p. 81.

¹¹⁰ Ibid., p. 80.

¹¹¹ Montebello, Pierre. *L’autre métaphysique. Essai sur Ravaisson, Tarde, Nietzsche et Bergson*. Les presses du réel, Dijon, 2003, p. 74.

theological, but natural. And he does reject the intellectual model regarding its finalistic proposal.

I disagree with Pearson when he states that: “In Bergson’s model no dominant tendency within evolution can be identified”. I will come back to this statement in 1.2. I have to say I am much closer to Pearson’s vision in 1999, more than ten years before the text I quoted, when he admitted a “residual perfectionism and anthropocentrism” in Bergson. This time, I would only question one word of the statement: I do not think it is “residual”, and I do not think that pluralism is threatened.

Pearson asks in the text: “but is he [Bergson] in danger of taking the invention of the form of man too seriously?”¹¹² Teleology and, specifically, anthropocentric teleology, seems to be something regrettable, something to be ashamed of. “*Undeniably*, he [Bergson] admits a certain finalism”, says one of the most brilliant recent commentators of the French philosopher, Riquier.¹¹³ Old commentators, like Tonquédec, Berthélot¹¹⁴, Lovejoy,¹¹⁵ Chevalier,¹¹⁶ or Le Roy,¹¹⁷ did not have so many problems with that.

However, I concede a certain “ambivalence” in Bergson regarding our subject, as Lacey says.¹¹⁸ In the only place where Bergson deals with this philosophical issue (EC) there is a lack of terminological stability. Sometimes he refers to teleology in a critical way, as we have seen in 1.1, and in other times he refers to it in a positive way, as I show in the next section. At one point, he also attributes some of his teleological terms to a “manner of speaking”.¹¹⁹ On the one hand, Bergson was not a systematic author, and on the other, this nominal ambivalence can be clarified from the context of the passages in the text.

1.2. ‘Creative evolution’ as a treatise on the reform of the concept of teleology

Bergson is certain that he is “not coming back to the old notion of finality”.¹²⁰ In this section I explain why EC is a reform of the notion of immanent teleology, regarding psychology, flexibility, effort and external finalism.

Bergson’s thought involves the *reform*, and *not* the destruction, of this “old notion of global teleology”. The early reader of EC, William James, observes that Bergson utilizes the concept of goal-directedness “within full rights” in a new vigorous form.¹²¹

¹¹² Pearson, Keith-Ansell. “Bergson and creative evolution/involution”. Op. cit, pp. 158-159.

¹¹³ Riquier, Camille. *Archéologie de Bergson*. Op. cit., p. 396, I translate Riquier. My emphasis.

¹¹⁴ Tonquédec, Joseph. “Comment interpréter l’ordre du monde?” in *Sur la philosophie bergsonienne*. Beauchesne, Paris, 1936.

¹¹⁵ Lovejoy, Arthur. *Bergson and romantic evolutionism*. UCP, California, 1914.

¹¹⁶ Chevalier, Jacques. *Bergson*. Plon, Paris, 1947.

¹¹⁷ Le Roy, Édouard. *Une philosophie nouvelle*. Félix Alcan, Paris, 1913.

¹¹⁸ Lacey, R. *Bergson*. Op. cit., p. 183. Like this author, I think that this teleological approach becomes even clearer in DS.

¹¹⁹ Three different moments in which he tries to avoid the term “finalism” are EC, p. 96-97, EC, p. 185 and EC, p. 265.

¹²⁰ EC, p. 96-97.

¹²¹ William James wrote to Bergson a letter on the 13th of June 1907: “Un des vos traits les plus heureux, ce me semble, est d’avoir réduit l’idée de ‘fin’ (dans son acception ordinaire) à la même condition que celle de la

Is time to read the textual evidence. In EC Bergson writes:

“... the philosophy of life to which we are leading (...) claims to transcend both mechanism and finalism; but, as we announced at the beginning, it is nearer the second doctrine than the first”.¹²²

It “transcends”, he says. I want to emphasize that Bergson is here talking about reform. He is trying to reform finalism, and not mechanism. In this sense he is not equally far from both. Now I quote both in English and in its original language two texts in which the idea of reform is much clearer.

“We must now show that if mechanism is insufficient to account for evolution, the way of proving this insufficiency is not to stop at the classic conception of finality, still less to contract or attenuate it, but, on the contrary, to *go further*”.¹²³

“Le moment est venu d’établir que, si le mécanisme ne suffit pas à rendre compte de l’évolution, le moyen de prouver cette insuffisance n’est pas de s’arrêter à la conception classique de la finalité, encore moins la rétrécir ou de l’atténuer, mais au contraire d’*aller plus loin qu’elle*”.¹²⁴

This sentence gives us a clear idea of the “reform” in a genuine sense. It is a reform, because it does not attempt to contract or attenuate the classic conception of finality, but to overcome it. It means that classic finalism is, according to Bergson, right from the start. But, apparently, it is necessary to apply its principles beyond its origins, whatever they are.

The next passage has to be read in accordance to the previous statement, since it completes it. It is also philosophically richer for us:

“[a]Yet finalism is not, like mechanism, a doctrine with fixed rigid outlines. It admits of as many inflections as we like. The mechanistic philosophy is to be taken or left: it must be left if the least grain of dust, by straying from the path foreseen by mechanics, should show the slightest trace of *spontaneity*. The doctrine of final causes, on the contrary, will never be definitively refuted. If one form of it be put aside, it will take another. [b] Its principle, which is essentially *psychological*, is very flexible. [c] It is so *extensible, and thereby so comprehensive, that one accepts something of it as soon as one rejects pure mechanism*. The theory we shall put forward in this book will therefore necessarily partake of finalism to a certain extent”.¹²⁵

“[a]Toutefois le finalisme n’est pas, comme le mécanisme, une doctrine aux lignes arrêtées. Il comporte autant d’infléchissements qu’on voudra lui en imprimer. (...) La doctrine des causes finales ne sera jamais réfutée définitivement. Si l’on en écarte une forme, elle en prendra une autre. [b] *Son principe, qui est d’essence psychologique*, est très souple. [c] Il est si *extensible, et par là même si large, qu’on en accepte quelque chose dès qu’on repousse le mécanisme pur*. La thèse que nous exposerons dans ce livre participera donc nécessairement du finalisme dans une certaine mesure”.¹²⁶

“cause efficiente”: c’est la couple. Vous rétablissez dans ses droits une finalité à la fois plus vague et plus vivante...” Bergson, Henri. *Mélanges*. Op. cit, p. 725.

¹²² EC, p. 50. Also EC, pp. 54-55.

¹²³ EC, p. 53, italics are mine.

¹²⁴ EC, p. 42, italics are mine.

¹²⁵ EC, p. 40, italics and additions a and b are mine.

¹²⁶ EC, 2009, p. 40, italics are mine.

Just after conceding this point to finalism, Bergson adds: “For that reason it is important to intimate exactly what we are going to take from it, and what we mean to leave”.¹²⁷ In the end, I believe, he does not indicate *exactly* what is he going to take and what he means to leave, as he promises. Neither did he explain the differences between different types of finalism that one can find in his work. From now on, despite this absence in the text, in this section I show how Bergson addresses those items.

In [a] we saw that for Bergson the theory of final causes in nature is “irrefutable”. This major claim might shed light on any “ambivalence” in the text. If Leibniz’s philosophy is “radical finalism”, it is evident that here finalism and mechanism are opposed. Once one wants to speak against mechanism (for whom the world is a sum of atoms, moved by inertial forces), one automatically becomes a finalist. Bergson is here included in that list of opponents of mechanism. There is not equal distance between both trends.

In [b] we can see why: he thinks that there is a “psychological” essence in teleology. This is crucial for us too. In mechanism there is no appeal to psychology. Moreover, in his opinion, psychology is, for the mechanists, a sort of illusion. Atoms and inertia do not compose psychology. On the contrary, finalist thinkers put psychological features at the very center of the problem and they want to give an account of that. Human consciousness or psychology can extrapolate certain aspects of itself to the world: directedness, for instance. In this sense, Bergson is clearly a finalist thinker. After DI his books are rich in analogies. He wants to challenge the problem of anthropomorphism, although he criticized some forms of analogy (see 1.1). In [c] we find that analogy is impossible to avoid and also that finalism has many forms. It seems that he is referring to history of thought there. In [a] he refers to this idea: finalism admits many inflections. In [c] he adds extensibility and comprehension as some other features.

According to [a] and [b] Bergson considers himself a finalist thinker. We are in awe that in his letter to Delattre he considers that a philosopher has to re-create its own terms, but at the same time, finalism is for him “irrefutable”. [b] shows the extraordinary affinity between finalism and Bergsonism: mind, as we experience it, has to take part of the psychological account. If we want to think about evolution, we definitely have to make room for the mind, since “life is of the psychological order”.¹²⁸ Also, as we saw in the critical section above, it has to be done according to exigent paradigms. One cannot make, for instance, the analogy between an artisan and nature itself. [c] shows clearly that Bergson is aware of the many possibilities of teleological thought. He sees it as having no rigid limits [a] and doctrinally admits inflections [a], as he previously said. In [c] Bergson returns to that idea. Moreover, he stresses his positive acknowledgement of finalism and its possibilities, since he talks about extensibility and comprehension. [c] links this discourse with the until now vague idea of *going further*.

1.2.a. Psychology

Besides these two doctrinal teleological statements, the following passages clarify the project of *going further* beyond classical finalism. They illustrate Bergson’s position regarding psychology, perfection and regarding the extension of teleology.

¹²⁷ EC, p. 40.

¹²⁸ EC, p. 257.

The first one explains something of his conception of psychology noted in [b]. We will see what is his conception of “being flexible” and “comprehensive” is. Namely, the text reveals Bergson’s dialogue with one American neo-Lamarckian, Edward Cope, and the latter’s conception of “effort”. Bergson refers to the idea of the spontaneous effort for the sake of adaptation to certain habitats.

“For it is quite conceivable that the same effort to turn the same circumstances to good account might have the same result, especially if the problem put by the circumstances is such as to admit of only one solution. But the question remains, whether the term “effort” must not then be taken in a deeper sense, a sense *even more psychological* than any neo-Lamarckian supposes”.¹²⁹

In DI Bergson thinks that “effort” is a suitable expression for giving a real account of what consciousness is, but in EC the meaning of that word becomes quite different. In one conceptual shift far beyond DI, in EC Bergson relates the effort with American neo-Lamarckism. Thus, every living being strives to adapt: according to Bergson, for giving a philosophical account of what life is, one has to give to the term effort a “more psychological meaning”.

The term is clearly psychological, given that “life is of the psychological order”. Bergson concedes that even in the neo-Lamarckian framework there is something psychological. But we need, he claims, something *more* psychological. Here Bergson is defending the view that, although it is right to transfer these anthropomorphic features to living beings, it is possible to *go further* than Cope. It is possible to find something “deeper” and more psychological than effort for the sake of adaptation.

As I said, the context of every passage is very important. Here Bergson is thinking of his general account of evolution. In this sense, effort could describe a tendency towards adaptation. Bergson does not deny the effort of conservation regarding a single niche. In this context, effort or adaptation is a second-degree force. There is something deeper. Creation is the deeper sense of effort and of psychology that he is actually talking about. The creative evolution is a deeper effort, which has to do with psychology.

We can see here that Bergson is remodeling the psychological principle found in neo-Lamarckism, and, by extension, the psychological principle in teleology.

1.2.b. Perfection

Finalism is extensible and comprehensive, since it has many forms. They all are psychological, but change regarding one thing: the understanding of perfection. In the passage above we saw that Bergson was asking for a “deeper” sense of psychology, which means a more essential and perfect sense of psychology or life. Effort was not the most perfect feature, although it can be admitted for a second degree.

The first-degree-force of human psychology and, by analogy, of biology and cosmology is creation. Creation here is one of the bases for the reform of classic teleology. In the cosmologic domain, Bergson says that nature, understood as the whole, “*is more and better than a plan in course of realization*”. A plan is a term assigned to a labor: it closes the future whose form it indicates. Before the evolution of life, on the contrary, the portals of the future

¹²⁹ EC, p. 77, italics are mine.

remain wide open. It is a *creation* that goes on forever in virtue of an initial movement. This movement constitutes the unity of the organized world—a prolific unity, of an infinite richness, superior to any that the intellect could dream of...”¹³⁰

The text could not mean a rejection of final causality, since it is irrefutable, but also rejects an intellectual model as analogy. In a way, he is claiming that intellect is one form of bad anthropomorphism. That is, nature has no plans. Plans are part of human intelligence and nature is “more and better than that”. As for Aristotle, nature is better than human techniques. Nature has to be *the best*. We can see how one cannot propose any analogy between nature and consciousness.

It is pretty clear that human labor, here linked to intellect, is *not* the best. Effort, and, especially in this context, creation *are* the best. The best means perfection, natural *télos*. Bergson emphasizes dynamic features of the *télos*, always using a perfectivist language. Natural entities strive to accomplish their natural tendency. In this case, we see that in EC he uses the terms effort and the more psychological and more perfect one, called creation. He is not a systematic author, so the same teleological concept of goal or end has other names too. Notably, in the cosmic context, in EC, the concept of progress can be found too. Bergson mitigates the anthropocentric and fatalistic element of the philosophical notion, as he finds it in previous philosophers. Thus, this natural progressive or perfective tendency towards completion is defended in an open framework, where deviations, contingency and only relative accomplishment:

“No doubt there is progress, *if* progress means a *continual* advance in the general *direction* determined by a first impulsion; but this progress is *accomplished only* on the two or three great lines of evolution on which forms ever more and more complex, ever more and more high, appear; between these lines run a crowd of minor paths in which, on the contrary, deviations, arrests, and set-backs, are multiplied”.¹³¹

Life is plural, unpredictable and wasteful, not harmonious. But it is still perfective, and can be explained teleologically. As we saw “flexibility” and “comprehensibility” are features of immanent teleology, historically understood. This other excerpt becomes even clearer regarding the notion of perfection or *télos*. But now the key term is not progress or goal, but “impetus”:

Bergson attacks mechanism or materialism because “[a] it excludes absolutely the hypothesis of an *original impetus*, I mean an *internal push* that has carried life, [b] by more and more complex forms, to higher and higher destinies. [c] Yet this impetus is evident, [d] and a mere glance at fossil species shows us that life *need not have evolved* at all, or might *have evolved only in very restricted limits*, if it had chosen the alternative, much more convenient to itself, of becoming ankylosed in its primitive forms”.¹³²

Sentence [b] is clearly talking about one teleological trend “by more and more complex forms, to higher and higher destinies”. It refers to a qualitative conception: high and complex are here forms of perfection. A “higher destiny” is to be read as a *better* destiny.

¹³⁰ EC, pp. 104-105.

¹³¹ EC, p. 104, my emphasis.

¹³² EC, p. 102.

1.2.c. Individual and global teleology

Still we can give ourselves a definitive hint of what he is trying to point out by saying “to go further”. Montebello, Ansell-Pearson and Lacey have already noted the curiosity of one passage in which Bergson dialogues with the neo-vitalist philosopher Hans Driesch around the latter’s doctrine of the entelechy in individual organic beings. This will be the last text of the section.

We see that Driesch defends *only* individual teleology. Focused on embryology, he thinks that there is within every organism one immaterial element called ‘entelechy’ that leads and coordinates the relation between whole and parts towards perfection. At the same time Driesch rejects external or global teleology. Bergson criticizes Driesch. Bergson argues against Driesch not because of the use of final causality *but because of the restricted boundaries* of his conception of teleology. Now we will read a long quotation of that passage, which is the real basis for the theory of the *élan*. This text evidences that Bergson knew that he was reforming teleology, namely, global teleology:

“But, though finality cannot be affirmed either of the whole of matter or of the whole of life, might it not yet be true, says the finalist, of each organism taken separately? Is there not a wonderful division of labor, a marvellous solidarity among the parts of an organism, perfect order in infinite complexity? Does not each living being thus realize a plan immanent in its substance? *-This theory consists, at bottom, in breaking up the original notion of finality into bits.* It does not accept, indeed it ridicules, the idea of an *external* finality, according to which living beings are ordered with regard to each other: to suppose the grass made for the cow, the lamb for the wolf- that is all acknowledged to be absurd. But there is, we are told, an *internal* finality: each being is made for itself, all its parts conspire for the greatest good of the whole and are intelligently organized in view of that end. Such is the notion of finality which has long been classic. *Finalism has shrunk to the point of never embracing more than one living being at a time. By making itself smaller, it probably thought it would offer less surface for blows.*

The truth is, it lay open to them a great deal more. Radical as our own theory may appear, finality is external or it is nothing at all.

Consider the most complex and the most harmonious organism. All the elements, we are told, conspire for the greatest good of the whole. *Very well, but let us not forget that each of these elements may itself be an organism in certain cases, and that in subordinating the existence of this small organism to the life of the great one we accept the principle of an external finality.* The idea of a finality that is *always* internal is therefore a self-destructive notion. An organism is composed of tissues, each of which lives for itself. The cells of which the tissues are made have also a certain independence. Strictly speaking, if the subordination of all the elements of the individual to the individual itself were complete, we might contend that they are not organisms, reserve the name organism for the individual, and recognize only internal finality. But every one knows that these elements may possess a true autonomy. To say nothing of phagocytes, which push independence to the point of attacking the organism that nourishes them, or of germinal cells, which have their own life alongside the somatic cells—the facts of regeneration are enough: here an element or a group of elements suddenly reveals that, however limited its normal space and function, it can transcend them occasionally; it may even, in certain cases, be regarded as the equivalent of the whole.

There lies the stumbling-block of the vitalistic theories. We shall not reproach them, as is ordinarily done, with replying to the question by the question itself: the “vital principle” may indeed not explain much, but it is at least a sort of label affixed to our ignorance, so as to remind us of this occasionally, while mechanism invites us to ignore that ignorance. But the position of vitalism *is rendered very*

difficult by the fact that, in nature, there is neither purely internal finality nor absolutely distinct individuality".¹³³

The text is crucial since it shows plainly that Bergson defends a sort of finalism not only regarding individual living beings, but also regarding all living beings as a whole. So "breaking up the original notion of finality into bits" is "self-destructive" because pure individuality in the organic realm is nothing but illusion. The evolutionary framework implied in EC leads "to suppose the grass made for the cow, the lamb for the wolf—that is all acknowledged to be absurd". But what about "phagocytes, which push independence to the point of attacking the organism that nourishes them, or of germinal cells, which have their own life alongside the somatic cells?" Pure individuality is hard to find here.

Bergson has nothing against teleology: "All the elements, we are told, conspire for the greatest good of the whole. *Very well*, but let us not forget that each of these elements may itself be an organism in certain cases...". Bergson agrees with Driesch in internal finalism, but not about rejecting the external one. Cells, reproduction and evolution overcome the concept of the individual, taken from mathematics, as he defended in DI. Organisms are composed of other organisms.

"Finality will not go down any easier for being taken as a powder. Either the hypothesis of a finality immanent in life should be rejected as a whole, or it must undergo a treatment very different from pulverization".¹³⁴ It is very different indeed. Regarding the notion of psychology and the notion of perfection, he reforms the contents coherently between each other. And now we see that he accepts both individual and global teleology.

The problem of reading the anti-teleological passages as if they were addressed to any kind of teleology whatsoever is that they leave these important texts unexplained. The entire world is defined by Bergson as one "exigency of creation".¹³⁵ And "with the human being life of consciousness reaches, at least potentially, its *highest state* of emancipation from the restrictions imposed on it by matter".¹³⁶ This leads to immanent perfectivism. He also says that "consciousness lies at the origin of life",¹³⁷ which in a way links human psychology with the rest of the natural beings. Human psychology is natural, hence humans have perfective features in common. The text on Driesch makes evident that Bergson was an exhaustive teleologist, since not only individual entities can be explained teleologically, but also all of them as a whole.

The above quoted interpreters think that despite Bergson's description of the natural history, Life "remains contingent in every aspect".¹³⁸ I think there is a great deal of contingency involved, but I wouldn't say that is the case in every aspect. Nature is always an exigency of creation. When Pearson says that "on Bergson's model no dominant tendency within evolution can be identified",¹³⁹ he is then not being accurate. Although, maybe his reading of Bergson fits better with the current concerns among biologists. In Bergson some species are conceived as "culminating points" of evolution: namely humans.¹⁴⁰ The difference between

¹³³ EC, pp. 40-42, italics are mine.

¹³⁴ EC, p. 44.

¹³⁵ Vaughan, M, Pearson, K-A, Miquel, P-A, "Responses to evolution". Op. cit, p. 360.

¹³⁶ Ibid., italics are mine.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ Pearson, Keith-Ansell. *Philosophy and the adventure of the virtual. Bergson and the time of life*. Op.cit, p.81.

¹⁴⁰ EC, p. 148. Curiously, also Hymenoptera.

humans and these animals is of “kind”, not of “degree”.¹⁴¹ In EC and with more emphasis in CV and DS *there is a dominant tendency in nature*. This, again, doesn’t lead necessarily to absolute anthropocentrism. As we know, the model of immanent teleology rejects it. At the same time, there is not fatalism involved. A great sum of contingency (although not “in every aspect”) contributes to making nature unpredictable.

1.2.d Scholarly interpretations

As I mentioned in the “Introduction” some of these ideas have already been pointed out. In the chapter IV of his book *From Aristotle to Darwin and back again* entitled “Bergsonism and teleology”, Étienne Gilson says something worth mentioning now. Gilson links “inadequate finalism” with “pre-determined ends”. He does so by comparing it to “true finalism”, according to which “forms [that are] immanent in nature”, forms “working from within to incarnate themselves there by modelling in matter according to their law”. According to Gilson, Bergson and Aristotle affirm a “true finalism”.¹⁴² Gilson says: “Perhaps Bergson himself was not, moreover, so far from Aristotle’s finalism as he imagined. Quite different from the false Aristotelism which he rightly criticized, Bergson finalism is rather close to the truth. Evolutionism separates them”.¹⁴³

Some pages after, Gilson completes this statement with another one, not less interesting:

“Seeing that he [Bergson] rejected a mechanical finalism, he did not have any other choice than to have recourse to any other notion of teleology *purified of its vices*. This new notion *owed its novelty to what was a return of the ancient immanent teleology of Aristotle*, less the forms which made the latter possible. This necessarily, raised *new difficulties for the doctrine*”.¹⁴⁴

Apart from the link between the two philosophers with respect to immanent teleology, the last passage contains some important general ideas for this investigation. Novelty may be understood as reinterpreting the classics and not any Adamistic a-historical creativeness. It can imply some purification, but also new problems for the reformer. Now it is time to turn to the classic source.

The relation between Aristotle and Bergson, has barely been studied and, as far as I know, never extensively.¹⁴⁵ Apart from Gilson, the Bergsonian scholar Henri Hude has also noted this influence. In Hude’s edition of the course on Greek philosophy of 1894-1895 given by Bergson at the Lycée Henry IV we can read in footnotes enlightening remarks. Namely, it is

¹⁴¹ EC, p. 200.

¹⁴² But Bergson “overlooks the possibility of an Aristotelian universe without Platonic ideas and without a Demiurge to impose them on matter from without”. Gilson, Étienne. *D'Aristote à Darwin et retour. Essai sur quelques constantes de la biophilosophie*. Vrin, Paris, 1971. Trans. John Lyon. Notre Dame Press, 1981, p. 99.

¹⁴³ Gilson, Étienne. *From Aristotle to Darwin and back again*. Trans. John Lyon. Notre Dame Press, 1981, p. 97.

¹⁴⁴ Ibid., p. 99, italics are mine.

¹⁴⁵ Hude in Bergson, Henri. *Cours IV*. Ed. Henri Hude. PUF, 2000, pp. 110-112. “Cette contribution n’est le lieu ni d’une analyse du rôle de Plotin chez Bergson, ni de celle, peut-être encore plus nécessaire à entreprendre, du rôle d’Aristote” says Vollet, Matthias. “Bergson historien de la philosophie”, *L’évolution créatrice. Études & Commentaires*. Ed. A. François. Vrin, Paris, 2010. p. 333. Also: Chedin, Jean-Louis, “ Deux conceptions du possible : Bergson et Aristote “, in *Revue de l’enseignement philosophique*, t. XXXVII, n° 2, décembre 1986-janvier 1987.; and Waszkinel et Hejno, Eugeniusz. “ L’inspiration aristotélécienne de la métaphysique de Bergson “. Vol. 89, N°82. 1991.

important for us since Hude comments on Bergson's lessons on Aristotle. In Bergson's lesson on *Physics*.II and the idea of teleology, Hude makes this commentary:

“Toute cette page est très suggestive pour la préhistoire de *L'évolution créatrice*. [a] On y trouve, d'une part, une comparaison, un rapprochement, pas encore nettement problématique, entre l'action de la nature et celle de l'art; [b] d'autre part, une idée de finalité, aristotélicienne sans doute, mais déjà retravaillée, et qui comprend dans ses possibles approfondissements l'idée d'un finalisme à la Bergson, (op. cit, 528 sq.) c'est-à-dire, où l'acte créateur est un acte analogue à l'acte de l'artiste et non plus à celui de l'ouvrier, un acte qui vise l'œuvre elle-même comme fin, et non plus une fin extérieure à l'œuvre dont l'œuvre ne serait que le moyen, un acte, enfin, qui tend à la perfection de l'œuvre à travers de multiples ébauches”.¹⁴⁶

This finalism *à la* Bergson completes Gilson's statements in noting that Bergson takes part in the history of teleology and that his model of immanent teleology is ultimately Aristotelian. Gilson and Hude are thus the forerunners of my work. In the text by Hude [a] there is the idea of analogy between the natural being and the artificial craft or human artisans found in *Phys.* II.1, 2, 3, 7 and 8. I agree that it is a prehistory of EC. Bergson defends there the analogy between natural beings and human consciousness. Also in that passage [section b], Hude notes that in Bergson there is natural directedness, which means a notion of perfection. As I said, only in EC the problem of teleology is faced as such, but in MM and in LR a teleological approach can also be found. Hude also considers MM to be an essay where the hylomorphic Aristotelian paradigm is implied. In this dissertation I follow up on the enlightening remarks of these two Bergsonian scholars.

¹⁴⁶ Bergson, Henri. *Cours*.IV. Op. cit., p. 269.