

Making sense of the relationship between Life and Technology: considerations for future generations.

« On aime la vie, mais le néant ne se laisse pas d'avoir du bon. »

“We love life, but the void is not all that bad.”

- Voltaire¹

Our attempt will be to make sense of the relationship between Life and Technology in order to open new perspectives on the topic. The argument proposed in this essay has originated two years ago and has been enriched since. However, the original intuition has remained the unchallenged backbone of my research. It has been adapted to suit the format of this coursework. The subject I am about to expound on is broad and has been the subject of numerous contributions throughout several academic fields. I acknowledge my novice status on the topic under study as a bachelor student. Nevertheless, I consider this work to be a challenging test to develop a personal reflection under the standards of academic writing. This is why I am going to attempt supporting my claims with a number of milestones and precise definitions. In this way, I hope to avoid as many confusions and misunderstandings as possible to my readers. To take into consideration all potential counterarguments and theories is not an easy task. Therefore, I have been endeavouring to situate my argument into the relevant academic debates and to explain my argument with care.

This essay follows a three parts structure. In the first part, I will attempt to propose an answer to the question: What is Life? More precisely, I am first going to point out the conditions for Life to emerge in the universe. For that, I need to draw upon the concepts of time and space as well as directionality. Then, I will focus on the history of Life as we find it on Earth and to draw upon the notions of organism complexity and survival.

In a second part, I will reflect on the idea of ‘technological direction’. For that, I am going to contextualise the emergence of technology based on the previous part. Then, I will introduce the theory of evolution of technics developed by Gilbert Simondon.

In a final third part, I am going to attempt drawing conclusions regarding the relationship between Life and Technology based on the two previous parts.

¹ (Schopenhauer, 2009, 95)

In this first part, our attempt will be to reflect on the emergence of Life as it appeared on Earth. We will try to point out the necessary characteristics for its birth and the scope it comes within. In a second subsection, we will focus on the history of Life and attempt to draw conclusions based on its evolution. To put it in a nutshell, the objective will be to answer the question ‘What is Life?’ without focusing on the details of its contingent manifestations in order to define it in a broad yet accurate manner.

This first subsection will therefore focus on the emergence of Life. In fact, we will focus our attention on the question ‘Why’ is Life. Though, our analysis will not venture into the territory of spirituality. We will not seek an overarching ‘plan’ of Nature. Rather, we will focus on the causes of Life instead of supposing a hypothetical objective. So, what is life a consequence of? First, we shall set out the scope within which Life must evolve. Or, to put it differently, the ‘natural laws’ that shape the universe. It is important to acknowledge this as an ultimate boundary. As Kuhn pointed out in his famous work *The Structure of Scientific Revolutions*, “scientific progress does not consist in getting closer to the truth” (Bird, 2012, 864). Thus, what is currently called ‘natural laws’ of physics, chemistry, biomechanics and so on shall not be considered as the ultimate and unchallengeable framework of nature. Instead, Kuhn argues in favour of the theory of ‘selection by conflict’ within the scientific community from which is said to emerge the “fittest way to practice future science” (Kuhn, 1996, 172). However, even after acknowledging that there might be a difference between humanity’s currently admitted scientific knowledge and the actual overarching ‘laws of nature’, one must admit that there *is* a frame built on laws that creates an order of Nature. The fact that the human race has not already reached a total understanding of it and might even never reach it does not invalidate its existence. Nature shall be understood in this essay the same way as Darwin defined it, namely: “only the aggregate action and product of many natural laws” where laws are “the sequence of events as ascertained by us” (Darwin, 1872, 93).

The notions of time, space and gravity can be considered as fundamental to the frame aforementioned. The Big Bang is commonly considered as marking the beginning of spacetime infinite expansion, 13,7 billion years ago (Turck-Chièze, 2009, 9). The theory of general relativity (Miller, 1997) supposes a change from a state of “initial singularity” to the event of

the Big Bang which constitutes the start of the expansion of space and time. We can therefore illustrate this phenomenon with the idea of a ray. That is, a straight line starting from an origin with a defined direction but with no defined end. Thus, we can assume a linearity, a continuity, a directionality where events taking place are only separated by time and space. The running of time under the frame of 'natural laws' led to the emergence of Life on Earth. I would like to focus our attention on the very fact of its appearance that first proves that this one is possible under the frame aforementioned. The questions of 'when' and 'where' are not relevant to our analysis and the question of 'how' shall be answered only by the following for the sake of our argument. The existence of time and space as well as 'natural laws' led to the gathering of necessary conditions for Life to appear on a planet (i.e. the masses of both the planet and its star, the distance between the two bodies and the composition of the planet). Gould even suspected that "the origin of life on earth was virtually inevitable" (1989, 289). He emphasised that Life as we find it on earth "exhibits a structure obedient to physical principles" and that the "invariant laws of nature impact the general forms and functions of organisms; they set the channels in which organic design must evolve" (Gould, 1989, 289; Sterelny & Griffiths, 1999, 296-7). These 'laws of nature' enable the emergence of Life which necessarily comes with the death of the individual living organism, because it is subjected to time. In other words, "death is the temporal end of the temporal phenomenon" (Schopenhauer, 2009, 128). However, death can be understood very differently if we broaden our scope of analysis. While the individual dies, the species survives. Naturally, no species is sheltered from extinction. External threats are everywhere and are even part of the natural selection process of the theory of evolution developed by Darwin. However, the species can be said to be naturally designed to strive for survival. First, because of a survival instinct. For Schopenhauer, the biggest fear that all humans and sufficiently complex organisms share is the fear of death (Schopenhauer, 2009, 129-130). According to him, this fear is not rational but inherent to our natural condition. He draws upon our attachment to life to conceptualize what he calls the *will to live*. It is important to notice that he does not fail to include other forms of life as sharing this *will*.

For him, this fear of death lies in the subjective difference individuals make between themselves and their species (129). The *will to live* manifests itself differently in the individual and in the species. The individual fears death and is continuously subjected to hunger and thirst. On the other hand, it manifests itself in the species with sexual instinct and solicitude for its progeny (130). Schopenhauer's argument is enlightening insofar as it proposes what we could call an inherent natural 'driving force' common to all forms of life, that is not dependent on reason but truly 'built in' a natural conception. To put it differently, species are driven by a compelling

force that leads them towards evolution. Here, we can mention a directionality. Though, it is important to make a distinction between what I call 'direction' here and a 'goal' or an 'end' to this direction. I will come back to this point later in the argument. Moreover, one might be tempted to make a distinction between simple and complex forms of life regarding this point. Indeed, the fear of death can easily not be granted to plants for instance. However, the difference of manifestation of the *will to live* between a plant and a dog lies only in their difference in organism complexity. Indeed, despite the fact that a plant does not show signs of a fear of death, it also cannot choose to commit suicide. In other words, given the necessary elements to live, grow, and reproduce, the plant will necessarily live, grow, and reproduce. Even under the harshest climate and conditions, if a plant can grow the *will* will operate, and it will grow. The difference with more complex forms of life lies in the capacity of this one to adapt and act for its survival. Fear and terror are only visible manifestations one can witness seeing a more complex form of life fearing for its life.

Sterelny and Griffiths acknowledged that the history of life has a directionality based on the ubiquitous character of evolutionary change and its irreversibility (1999, 280). Additionally, the evolution of life is broadly recognized as having displayed an increase in complexity of life forms over time. This point has been the source of many debates in the biology literature (Sterelny & Griffiths, 1999, 280-96). Thus, it is crucial to define the boundaries of our understanding regarding the notion of complexity. First, it is important to exclude the notion of progress advocated by Ruse (1996) who considers that the history of life is the history of progressive improvement. The notion of 'progress' implies an end towards which the direction is leading. This teleological perspective was notably the one of Kant who stated that "man is made to colonise and reign over the Earth" (Kant, 1993, 289). This is precisely what Darwin's theory of evolution seeks to invalidate. Indeed, his theory claims that "the only species to hold their ground within variability are the fittest to survive in the environment, winning the 'struggle for life' against other species" (Solal, 2010, 11). Darwin's theory does not recognize any goal set by God or Nature, but instead that natural selection is the mechanism responsible for the "gradual but steady emergence of more elaborate, further articulated, and vastly more specialized organisms" (Kuhn, 1996, 172). The 'struggle for life' as the driver of natural selection emphasised by Darwin chimes with the concept of the *will to live* developed by Schopenhauer, even though both concepts belong to different fields (i.e. biology and philosophy). The two men were contemporaries and Darwin even made reference to the work of his German neighbour in his work *The Descent of Man, and Selection in Relation to Sex* (1891, 641) in regard to the fundamental importance of love for humans compared to any other

aim they might have. For Schopenhauer, this is due to the fundamental importance it has in the reproductive process of the species or in the species' *will to live*. Additionally, he attributes to both humans and animals (i.e. non-human animals) some common instincts such as the 'love of life', 'sexual love' and the love a mother has for her progeny, among others (Darwin, 1891, 68). Thus, it becomes clear that we can find in both the works of Darwin and Schopenhauer this idea of natural 'driving force' providing a direction to the evolution of life in time.

Another assessment can be made regarding the evolution of Life. Indeed, first forms of life are known to be simple and complexity has developed through time (Sterelny & Griffiths, 1999, 282; Castle, 2001, 410). Nevertheless, it cannot be stated that all organisms tend to more complexity over time. Instead, scientists have come to a consensus regarding the assessment that there has been a continuous increase in species complexity over time and a decrease in species number. Not that all organisms became more complex but that some species appeared to be immensely more complex than others. This increase in complexity came with a development of intellectual faculties where the human race is the species displaying the more developed form. However, as Darwin and others have rightly pointed out, humans are not the unique species to display those faculties. It can be argued that the increase in organism complexity is concomitant with the faculty of a species to adapt to its environment for survival. As Darwin emphasised, mental faculties enable a living organism to "adapt its body, which does not change, to the environment, that constantly changes" (Darwin, 1891, 137). I would like to put forward that this increase in complexity and therefore the development of mental faculties that come with it has a direct result in the capacity of the species to fulfil its 'natural obligations' or, in other words, its 'natural driving force'. In that, the more complex and intelligent a species is, the more capable it is to act towards its own survival through the survival capacity of its composing individuals. In concrete terms, a bonobo is better able to survive to its environment compared to a less complex form of life, say, a plant, insofar as it is able to act (i.e. move, communicate, reach food etc.) in order to eat, drink, secure itself, and procreate. An example might prove interesting to illustrate this point. Tissier et al. (2017) studied the endangered species of the European hamster. They showed that the decrease of population was due to a change of their diet. Indeed, humans' cereal monoculture has restricted the animal's diet and has led to a vitamin B3 deficiency for hamsters which directly impacted their reproduction. In fact, the study shows that this deficiency caused by maize-led diets causes high rates of maternal infanticides in the European hamster. On the other hand, the University of Barcelona hosts a program led by the European Space Agency (ESA) named MELiSSA. The goal of this program is to create a close-loop life support system for long-duration space

missions. Concretely, its aim is to enable growing food in the most hostile environment for any living organism: space.

This example illustrates clearly what differentiates two differently complex organisms; it is their capacity to survive within their environment. The European hamster is more dependent to its environment than humans and therefore, more exposed to death and extinction threats. Based on what has been developed above, we can define the intelligence of a species as its capacity to face the various obstacles that stand between them and their 'natural objectives' that is, the preservation of the species.

According to Gaspard Koenig, Nick Bostrom has remained quite vague regarding its conception of intelligence. Though, he is said to follow the view of his acolyte Max Tegmark who defines it as "the capacity to accomplish complex goals" (Koenig, 2019, 85-6). Koenig interprets this definition as the search of optimal means to accomplish an externally imposed finality. I consider that Tegmark's definition is too vague to discuss it accurately. However, Koenig expresses his disagreement with it regarding the capacity of Artificial Intelligence to become "intelligent" on account of the fact that it is impossible for humans to impose a human finality to AI programs for two reasons. First, because these are incomprehensible for a program notably because of the "symbol grounding problem" and second, because the human race cannot reach an agreement on the content of these finalities (Koenig, 2019, 87). I suggest that the notion of finality might not be accurate regarding this debate. Instead, I propose to switch perspective and attempt to focus on a potential inherent 'driving force'. Intelligence applied to life can be understood to be a function of its capacity to accomplish its natural obligations, that is, species' survival. I would like to suggest that Technology might have its own 'driving force', its own direction instead of a finality. At first glance, Technology's aim could be considered to be to serve intelligent living organisms to accomplish certain tasks. I cannot pronounce myself on Bostrom's definition, but if he understands "complex goals" as an externally imposed 'inherent obligation' like survival is for living organisms, then our perspectives could match.

This second part of the essay focuses inevitably on Technology. I would like to situate its emergence into the evolution process of Life previously expounded. More precisely, I intend to characterise the relationship between Life and Technology. For that, I am going to reflect on the conditions for its emergence and attempt to define the concept based on its relationship with Life. In a second subsection, I will introduce and draw upon Simondon's theory of technological evolution in order to investigate the hypothesis of a technological 'driving force'.

The creation of tools is commonly attributed to the human race only. Some even identify the phenomenon as being the fundamental difference between humans and other animals. Yet, the scientific community knows today that this is a false belief. Darwin had already revealed it, noting that some monkey species create and use tools for various uses such as to eat or to protect themselves from punches (Darwin, 1891, 85). This assessment leads us to put forward the fact that the condition of emergence of Technology is a certain level of biological complexity. The human race is a more complex species than the one of great apes and the complexity of tools created by both follows this difference. The question of the contingency of the emergence of Technology can be answered by situating this emergence within the evolution process of Life and by emphasising its *raison d'être*. Homo sapiens first created simple tools to increase its chances of survival. Sharp silex helped him to feed and protect himself, simultaneously guaranteeing a higher chance of reproduction. Thanks to sufficient intellectual faculties enabling memory, imitation or curiosity, the species mastered fire. This event is considered as a turning point for the species' evolution insofar as it enabled a change in diet that played a crucial role in the development of its brain (Milton, 2003). The birth of Technology had started. Life and Technology have played a crucial role in each other's development. Without the mastering of fire, the development of homo sapiens' brain would have been jeopardised and the internal combustion engine would never have seen daylight. As Bernard Stiegler stated: "the artefact is the mainspring of hominization, its condition [...]" (Stiegler, 2018, 37). Here, I would like to add that *homo* is also the mainspring of technology as well as its condition. Or, to put it differently, that a certain level of living organism complexity under the 'laws of nature', time, and space, is the mainspring of technology, as well as its condition. It would have been interesting to have access to a graph showing the evolution of Technology complexity as well as the number of technical objects created by the human race through time, just like the ones corresponding to species presented by Sterelny and Griffiths (1999, 286). Nevertheless, I assume it could be safely argued that the complexity of Technical objects throughout the history of the human race experienced a phenomenal peak starting from the Industrial Revolution from

the second half of the eighteenth century. We already noted that Technology finds its *raison d'être* in the role it plays in helping sufficiently complex living organisms to fulfil their 'natural obligation' (i.e. survival of the individual and of the species). I argue that this is true for all kinds of artefacts and technological objects. Indeed, only the degree of their utility for survival might vary. But I suggest that this is ultimately, universally true. The 'tree of Technology' expands on condition that the urgent requirements for survival are met. In that, the nail file necessarily comes after the bucket because the latter proves to be closer to immediate survival needs. It is only when the need to drink is secured for a community that the nail file can appear. One might also wonder about the role played by the nail file for survival of the species. In fact, this one is certainly far from immediate survival requirement but is actually linked to it. The more the human race secured itself and became comfortable in its prospect to survive as a species, the more complex community interactions appeared. Thus, to put it simply, the nail file finds its survival purpose in the role it plays in the importance of appearance the individual finds to please to the community. Being accepted by the community one belongs to can be seen as crucial for the security of the individual. Conforming its appearance to the society's criteria can be interpreted as a means to increase its chances to feed adequately and provide security to its progeny.

To rapidly summarize this point, we can say that Life and Technology have played a crucial mutual role in the development of one another. In that the form of Life displaying the more complex organism and mental faculties (i.e. the human race) led to the emergence of Technology that in turn enabled it to develop further. This Life (or Human) – Technology couple have been the subject of many discussions and interpretations. Needless to say that I cannot mention all of them so I will focus on one interpretation developed by Michel Puech in his book *Homo sapiens Technologicus* (2008). According to the author, humans are a proceeding from Nature and artefact. They are "inseparable from their technology; technology is what makes the human *human*." (Goeminne, 2013, 583). In this way, he intends to settle the debate about contemporary technological issues such as climate change, genetic modification and others, by denouncing the perspective they arise from. For him, these debates originate from a categorization between natural and artificial. He claims that this categorization necessarily leads to either technophilia or technophobia, "two attitudes that are mistakenly grounded in the idea of a technology-independent 'natural' human that seeks to relate to 'artificial' technology" (Goeminne, 2013, 582). I do meet his view on categorization. However, I believe that Puech might be missing an interesting point that my argument brings. In light of

the 'driving force' perspective developed previously, it is clear that humans have remained purely natural since their emergence. In the sense that their 'natural driving force' towards survival, that is, mentioned in passing, common to all forms of Life, has never ceased to accompany its evolution through time. Technology has not changed it. It is even this very 'natural driving force' that is the source of the emergence of technology insofar as its role is to fulfil complex species' 'natural obligation' of survival. If humans are humans because they master technology, then bonobos are also humans. If the difference lies in the level of complexity of the Technology mastered, then bonobos are humans 'in the making'. No, I believe that his interpretation of the human – technology relationship is mistaken or to say the least, insufficient. To push the argument further, it could be stated that Technology can be considered as the offspring of Life, brought to daylight by its more complex form which is itself the result of a natural mechanism of selection. It is Nature that created Technology through its life mechanism. This perspective enables to avoid the long-time criticised and often disqualifying Homocentrism. We have then witnessed a cooperation taking place between Life and Technology for their mutual development where the only and ultimate purpose of technology was to support species 'natural obligations'.

Technical objects have significantly evolved since the creation of the wheel. Gilbert Simondon produced a fascinating work in philosophy of technology, though challenging to apprehend. In *On the mode of existence of technical objects* (2012), the author presents his theory of evolution of technical objects through his concept of *concretisation*. Simondon provides a definition of the genesis of technical object, as being "what is not anterior to its future being, but existing at each stage of this future; the technical object 'one' is a unit of future being". In other words, "the petrol engine as we find it today is not any given engine in time and in space, but the fact that there is a future, a continuity that comes from the first engines to the ones we know, that are still evolving" (Simondon, 2012, 13). Also, "an object can be said to be technical only if it operates in relation with other objects, within a network where it takes the signification of a key point" (Hottois, 1993, 59). According to the author, a technical object evolves from an *abstract* mode to a *concrete* mode (Simondon, 2012, 26-7). A *concrete* technical object demonstrates an entire coherence with itself, it is entirely unified. All its composing parts work perfectly together without producing waste unlike in its *abstract* form where the system is "divided against itself" (Simondon, 2012, 34). To put it simply, Simondon considers technical objects as "evolving entities characterised by internal conflicts in their

structures and functions” (Schmidgen, 2012, 18). For the author, the *abstract* technical object results from handicraft whereas the *concrete* one is enabled by standardisation. In his view, technical objects evolved towards a small number of specific types (by the means of standardisation) in accordance with an internal necessity rather than because of economic or practical influences. He adds that it is the intrinsic necessity of standardisation of technical objects corresponding to their *concretisation* that led to the emergence of the assembly-line, not the contrary (Simondon, 2012, 28-29). For him, the perfection of a technical object does not ensue from its degree of automation. Automation is justified by economic or social influences rather than technical ones. Instead, the perfection of a technical object lies in its ‘margin of indeterminacy’ (i.e. its sensitivity to external information) (Simondon, 2012, 12). In other words, openness and flexibility are criteria of technical perfection. Simondon’s theory of evolution also points out this notion of linearity and continuity that we emphasised in the first part of this essay. The evolution of technical objects is entirely dependent on human action, but they do have “a life of their own” (Schmidgen, 2012, 20; Simondon, 2012, 12). The author also observed that our symbolic culture is inherited from the past and that this one is not adapted to the current mode of existence of technical objects. In other words, our technical knowledge is extremely scarce even though technology has never been so present in our lives. There is therefore a dissociation between culture and technics that produces fear and mental blockage throughout society, as well as technological alienation (Hottois, 1993, 51-2). For Bernard Stiegler the relation between humans and technical objects have profoundly changed. He claims that “today, machines are the tool bearers, and the human is no longer a technical individual; the human becomes either the machine’s servant or its assembler” (Stiegler, 1998, 23). After reminding Simondon’s claim that technological improvement lies not in its increasing automation but in the emergence and evolution of machines that are open to regulation, Schmidgen notices the significantly problematic nature of current digital technologies (Schmidgen, 2012, 30). Indeed, he describes their interfaces as visually attractive but almost exclusively ready-made and black-boxed, leaving no room for ‘margins of indetermination’. A great example would be the IOS system developed by Apple that is particularly opaque. Recently, the company launched its yearly update called IOS 13. This update caught my attention because it includes a new ‘system app’ (i.e. embedded inside the system and irremovable by the user) called *Shortcuts*. This app enables users to create personalised algorithms to systematize tailored actions using all the software capacities. Thus, the possibilities seem endless. Users are now less bound to a specific usage. However, its use

requires a minimum of coding skills and I doubt that all IOS users benefit fully from these new possibilities.

In this part, we have seen that the emergence of Technology is rooted into the evolution of Life. Both have mutually benefitted each other's development. Additionally, the theory of evolution of technological objects put forward by Simondon taught us much about the directionality of technological development. It can be noticed that the level of perfection of most current technical object, drawing upon Simondon's perspective, is far from optimal insofar as our culture has not sufficiently taken into account the open and flexible nature of modern machines. This perspective enlightens us regarding the authentic nature of technological objects. In the sense that they have "a life of their own", a unique evolution trajectory from *abstract* to *concrete*. We pointed out that only humans could lead these objects towards *concretisation*. Nevertheless, *concretisation* corresponds to technical objects' own dynamic.

We can suppose that even though technological evolution demonstrates its own dynamic, the *raison d'être* we assigned technology remains the same. That is, to support humans in their strive for survival. At least, it can be considered to be the reason for its emergence. Given the increasing threats all living species face today, the question that this final synthesizing and concluding part will attempt to answer is the following: can we consider the evolution dynamic of technology to be a threat to the natural evolution of Life? Or, in other words, can we say that technology backfired against what has brought it to being, as a consequence of its intrinsic dynamic?

In the previous part, we drew upon Simondon to emphasise the requirement of a standardised mode of production for the concretisation of technical beings. More, "there is a convergence between economical constraints (diminution of raw material, labour force, and of energy consumption during use) and strictly technical requirements" (Simondon, 2012, 30). Therefore, standardisation appears to be inevitable for technological progress. Simondon stresses that 'strictly technical requirements' are the major driver of standardisation and technological progress. Meaning that major breakthroughs were mostly the result not of

economic and social drivers, but of technical necessity. The main examples are the breakthroughs resulting from military necessity. We can invoke developments such as aviation or even the internet which were first developed for military purposes before reaching the general public. Thus, if technical evolution is not much driven by social and economic incentives (e.g. consumption), it appears that technical evolution seems out of the hands of the majority either through economic and social pressure or international political dialogue. The environmental disaster threatening all living species could be considered as a collateral casualty of necessary technological evolution, insofar as this one cannot be managed on the scale of humanity. What I would like to emphasise here is that technological progress continuously enables more influence on Nature. Following its own continuity, technology has to enable more and more influence that is out of reach for the individual or of political consensus. Despite potential ethical norms or political decisions that are strictly settled in time and space in a given society at a particular time, technological development seems unstoppable. If a stage of technological evolution is reached somewhere and sometime, it is most likely to spread and enable further evolution. Based on this anarchic configuration, it is difficult to foresee any potential monitoring taking place. Evolved technical objects necessarily spread across the world as they have constituted a need for everybody's 'tree of survival needs' (i.e. from the bucket to the nail file) leading to an intensification of exchanges and in turn, to environmental issues. Stiegler stated: "The co-operation of technics and science in complicity with industry, then, has become manifest, bodily and mentally, through the dynamics *inherent in* technology and technics" (Stiegler, 2011, 189). Other examples of recent achievements enabled by technological evolution can be put forward. Genetic manipulation makes radical acceleration of the diversification of life forms possible, but also enables the threat of undifferentiation. In both cases, it undermines the natural mechanism of Life evolution. The case of radical life extension is admittedly more uncertain, but its achievement would as well subvert the core driving force of Life: death.

To conclude, this essay has attempted to recontextualize the mutual relation between Life and Technology. We intended to make sense of both entities' emergence and evolution by putting into perspective their relationship. We saw that Technology originated from the continuity of Life evolution under 'natural laws' and powered by a natural 'driving force'

common to all living species: the *will to live* that notably manifests itself in most complex organisms in their fear of death. This fear of death incentivized complex living beings to find means to survive and guarantee procreation through time. This is where technology emerged and finds what we called its *raison d'être*, namely, the reason for its existence. Life, in its most complex form (i.e. homo sapiens), could develop further thanks to the mastering of Technology which also benefited from this mutual collaboration to evolve according to its own dynamic. After a long period of time on the scale of humanity but a rather short one on the scale of time itself, Technology imposed its mode of *concretisation* and experienced a phenomenal peak in its evolution as a result of the establishment of standardised modes of production. The “cooperation of technics and science in complicity with industry” (Stiegler, 2011, 189) has had a significant influence on the Life’s mechanism of evolution. The array of consequences of this influence could lead to further discussions if the overall argument proves to be sound. This argument led us to the conclusion that the ‘driving force’ that led to the emergence of Technology seems to end up being undermined by the latter, implying a reversal of its initial *raison d'être*. Stiegler described the artefact as being the mainspring of hominization and its condition. It may well also be its fate.

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