The Method of Humanity

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Might the grand collective cognitive operation of humanity, termed the noosphere, be oriented by a methodological direction? Rewording the original ideas of Pierre Teilhard de Chardin in contemporary academic terms, I conceptualise the noosphere as an ongoing interrelating of cognitive processes: an interrelating which progresses through a particular kind of events. I define these noospheric events as instances of cognitive interiorisation that is conducted in a consciously contingent way. I propose that such rewording allows us to address the methodological question of this essay quite precisely.

1. Introduction

Formation of a methodology marks a pivotal moment in the development of any domain. Until methodologically reflected upon, the method which is being applied in a particular domain may be barely if at all distinguishable from the practice itself. The former could be perceived as a recurrence of a pattern and the latter as an enactment of a sequence that carries the pattern out, but this distinction may be conceptually problematic and its application arbitrary. Only when a methodological reflection enters the scene, the difference between the method and the practice that abides by it becomes crystallised. Such an added reflection does not need to take a
form more elaborate than the simple question of how a particular activity is to be conducted and why in that way. This might be asked in an attempt to understand, learn from, or advance an already existing practice, or in opening a path towards a novel one. Notwithstanding whether the method is known or is yet to be found, the appearance of the methodological reflection indicates that a considerable development has already taken place. For the ‘how and why?’ question to arise, the conditions of the practice in question must have been settled. An agency capable of enacting the practice must have been conceived. Some degree of freedom as to how the action might go must have been established. Most significantly, the locus from which the question arose must coincide with, or at least be transferable and applicable to, the locus whence the freedom to act can be exercised. The methodological question arises from within, or on behalf of, not irrespectively of the agency at play. In the course of addressing it, even more determination becomes necessary that further consolidates the conditions in relation to which the method is shaped. To be able to address the ‘why in this way’ side of the question, we need to relate it to the qualities, values, or effects that the practice is intended to bring forth. If we do not understand the practice’s intent or aim, we might witness it, or carry it out, we might implicitly know how it goes and be able to extrapolate from it, but we cannot yet speak of its method, as a differentiated thinking tool. When we do, a lot of predeterminations are already in force.

In this essay, I attempt an exploration of how far into the methodological kind of reflection we might be able to venture, when the practice in our consideration is taken to be humanity as such—that is, when our focus is set on the entire collective practice of being human. Might it be possible to think methodologically about such a monumentally scoped domain? Can we crystallise the difference between the practice and the method when speaking in universal terms, jointly, of the deep history, long-shot trajectory, and the intricate complexity of humanness?

It is certainly possible to speak of that scope generally and descriptively, as if from the outside, in terms of the theory of evolution, big history, or the Anthropocene. There are also the many ideological, socio-political, metaphysical, and religious
framings that pose the universal ‘how and why?’ questions from within the human condition and propose their answers as applicable to its entirety. Yet, it seems that such answers cannot but delineate structures of meaning and instil boundary conditions which in their historicity and situatedness become self-differentiated from within the overall human system. However general and universal a particular framing might be in attempt, there are always practises that will opt out of it. Considered in retrospect or from afar, it becomes apparent that in aiming at universalisation and ahistoricity, the particular framings fail. The question of whether it is possible to speak about the ‘how and why in this way?’ from within the entire human system must, therefore, not seek yet another way to generalise and coalesce all the diversely established agencies. Rather, a methodological kind of reflection should seek to render intelligible the situation which proves such generalisations ultimately impotent: the persistent partiality, the internal differentiation and incommensurability, and the ongoing incompleteness of the collective practice of being human.

2. Collective oeuvre of humanity

The monumental domain which encompasses the entire collective practice of humanity has been termed the noosphere. The notion was coined in 1922 by Pierre Teilhard de Chardin (1966 [1923]), a French Jesuit, scientist and mystic, and elaborated into a secularised, much demystified version in Teilhard’s conversations with Vladimir Vernadsky, a Soviet geochemist, and Édouard Le Roy, a French philosopher and mathematician¹. Reflecting on the phenomenon of ‘hominization’ of our planet, Teilhard de Chardin pictured humanity as a vital, organic unity which performs an unprecedented oeuvre of enveloping the planet with a network of reflective, conscious activity. This operation, observed Teilhard, amounts to a radical reorganisation of the very composition of the terrestrial globe.

The most empiricist, geological aspect of the concept has later morphed into the ‘Anthropocene’, as a candidate name for the current geological epoch (Zalasiewicz et al. 2019)\(^2\). The noosphere has been also theorised from information theory and systems-cybernetic perspectives, as a global network of technology-mediated processes of communication and coordination, termed the Global Brain (Bernstein, Klein & Malone, 2012; Goertzel, 2002; Heylighen, 2011a; Mayer-Kress & Barczys, 1995; Russell, 1995; Heylighen & Lenartowicz 2017). However, in attempting to address the methodological angle as it is proposed in this essay, we need to elaborate an understanding of the noosphere as a practice situated ‘from within’: from the intentional standpoint of the agency that steers and carries that practice out. For that purpose, the original descriptions of Teilhard de Chardin (1947, 1966) with a few important adjustments and footnotes, seem to offer a more suitable point of departure than their subsequent more scientifically objectivised developments do.

In Teilhard de Chardin’s understanding, the web of the noosphere distinguishes itself from within the biosphere by the means of its reflexive, interconnected consciousness. The noosphere cannot therefore, for the reason of its constitutive self-differentiation, be explained in terms analogous to how we might theorise about an existence that is only biospheric\(^3\). If above and beyond belonging to the biosphere an observed phenomenon is also noospheric, we may expect that it will, as if, instantly return our gaze. Even more perplexingly, due to the interconnected nature of the noosphere, it will be capable of joining our observation and partaking in it. This capability of the noospheric phenomena is assumed here deductively: it follows from what the notion of the noosphere was proposed to mean. For, in order for an observed phenomenon to qualify as a noospheric kind of existence in the first

\(^2\) The use of the term Anthropocene has later widened beyond the strict context of geochronology and came to signify the overall paradigmatic relationship between humanity and all terrestrial ecosystems (Shoshitaishvili, 2020).

\(^3\) For the sake of the clarity of the scope of this essay, I am following Teilhard de Chardin’s humanity-focused line of conceptualisation. In that, I am putting aside the non-trivial question of whether or not the idea of an ‘only biospheric’ (or even ‘only geospheric’) kind of existence is philosophically and scientifically sound.
place, its cognitive activity must be not confined within the boundary of its organic structure. Rather, its biologically organised cognition must be already incorporated within a larger network of intelligence--to which our own process of observing that phenomenon belongs as well.

Teilhard de Chardin describes the transition from the biospheric to the noospheric ways of existence in these words:

If we were to appreciate this strange phenomenon we must look back over the normal development of living forms before the coming of man. It can be characterized in two words: from its first beginnings it never ceased to be “phyletic” and “dispersive.” [...] Until the coming of man the patter of the Tree of Life was always that of a fan, a spread of morphological radiations diverging more and more, each radiation culminating in a new “knot” and breaking into a fan of its own.

But at the human level a radical change, seemingly due to the spiritual phenomenon of Reflection, overtook this law of development. It is generally accepted that what distinguishes man psychologically from other living creatures is the power acquired by his consciousness of turning in upon itself. The animal knows, it has been said; but only man, among animals, knows that he knows. [...] So much is clear to everyone. (Teilhard de Chardin, 1947)

What is less sufficiently noted, continues Teilhard, is that the self-reflective capability of human consciousness goes hand in hand with its networked constitution:
By virtue of this power of Reflection, living hominized elements become capable (indeed are under an irresistible compulsion) of drawing close to one another, of communicating, finally of uniting. [...] In time, with the reflection of the individual upon himself, there comes an inflexion, then a clustering together of the living shoots, soon to be followed [...] by the spread of the living complex thus constituted over the whole surface of the globe. The critical point of reflection for the biological unit becomes the critical point of “inflexion” for the phyla, which in turn becomes the point of “circumflexion” [...] Or, if you prefer, the reflective coiling of the individual upon himself leads to the coiling of the phyla upon each other, which in turn leads to the coiling of the whole system about the closed convexity of the celestial body which carries us. Or we may talk in yet other terms of psychic centration, phyletic intertwining and planetary envelopment: three genetically associated occurrences which, taken together, give birth to the Noosphere. (Teilhard de Chardin, 1947)

In redescribing these passages into more contemporary, scientific terms, Clément Vidal (2020) points to the systems of symbolic and linguistic communication as the mechanism which brings about the unifying effect described by Teilhard. ‘This inevitably involves a level of conformity and convergence toward a shared mentality’, notes Vidal.

What can be shared, by the means of such converging mentality, is knowledge:

Research, which until yesterday was a luxury pursuit, is in process of becoming a major, indeed the principal, function of humanity. [...] As in the case of all the organisms preceding it, but on an immense scale, humanity is in process of “cerebralizing” itself. And our proper biological course, in making use of what we call our leisure, is to devote it to a new kind of work on a higher plane: that is to say, to a general and concerted effort of vision. The Noosphere, in short, is a stupendous thinking machine. (Teilhard de Chardin, 1947)

The stupendous cerebralised machine of the noosphere generates and propagates not only structures of abstract reasoning and practical know-how, but also beliefs and values that organise the spiritual, cultural, and ideological processes of humanity. The terms in which Teilhard de Chardin describes these aspects of the noosphere, however, demand a careful, critical reading: they cannot pass without contextualisation of Teilhard’s worldview from historical, religious, and even psychological and aesthetic perspectives. To illustrate the necessity of all of these, let us consider the following passage:
Like the petals of a gigantic lotus at the end of the day, we have seen human petals of planetary dimensions slowly closing in upon themselves. And at the heart of this huge calyx, beneath the pressure of its in-folding, a center of power has been revealed where spiritual energy, gradually released by a vast totalitarian mechanism, then concentrated by heredity within a sort of super-brain, has little by little been transformed into a common vision growing ever more intense. In this spectacle of tranquillity and intensity, where the anomalies of detail, so disconcerting on our individual scale, vanish to give place to a vast, serene and irresistible movement from the heart, everything is contained and everything harmonized in accord with the rest of the universe. [...] Thus harmony is achieved in the ultimate perspective, and, furthermore, a program for the future: for if this view is accepted we see a splendid goal before us, and a clear line of progress. Coherence and fecundity, the two criteria of truth. (Teilhard de Chardin, 1947)

The first and foremost objection to Teilhard’s sentiment here will be probably immediately obvious to anyone who has lived through the era of the 20th century grand narratives, or has been afterwards educated about the monstrous consequences of their totalising ideologies. While writing these words just after the end of World War II, Teilhard de Chardin was still highly optimistic about the prospect of a cultural and political unity on a global scale. Speaking interchangeably about the interflo of cognitive processes among the human organisms, the technological and scientific formation of a collective knowledge base, the spiritual interconnectedness of being, and also, clearly, the civilisational mergers catalysed by the 20th century ideologies and clashes, Teilhard lacked precision in distinguishing one from another. Mixing them together, he was extrapolating some of his predictions from a particular—his contemporary—state of political and moral affairs: the unprecedented surge of global cooperation that culminated in the formation of the United Nations and several other institutions of global governance.

Teilhard wrote:
Let us glance over the main stages of this long history of aggregation. First, in the depths of the past, we find a thin scattering of hunting groups spread here and there throughout the Ancient World. At a later stage, some fifteen thousand years ago, we see a second scattering, very much more dense and clearly defined: that of agricultural groups installed in fertile valleys — centers of social life where man, arrived at a state of stability achieved the expansive powers which were to enable him to invade the New World. Then, only seven or eight thousand years ago, there came the first civilizations, each covering a large part of a continent. These were succeeded by the real empires. And so on . . . patches of humanity growing steadily larger, overlapping, often absorbing one another, thereafter to break apart and again reform in still larger patches. As we view this process, the spreading, thickening and irresistible coalescence, can we fail to perceive its eventual outcome? The last blank spaces have vanished from the map of mankind. There is contact everywhere, and how close it has become! Today, embedded in the economic and psychic network which I have described, two great human blocks alone remain confronting one another. Is it not inevitable that in one way or another these two will eventually coalesce? (Teilhard de Chardin, 1947)

As we know today, the two human blocks that were ‘remaining’ at that time, the Allies and the Axis powers of World War II, did not simply coalesce into one homogenous human unity. Instead, the socio-political scene of the 21st century is now multilateral (Lawrence, 2000) and internally differentiated into functionally specialised subsystems (Ziemann, 2007). Rather than progressing towards unification, the trajectory of global development as it appears today, is leading towards an ever complexifying gridlock of influences and interdependent functions in which countless stakeholders hold one another in check and need to carefully deliberate their mutual interdependencies (Hale, Held & Young, 2013; Lenartowicz et al., 2018).

Today, the gridlock of myriads of interdependent, interbalancing agendas and tendencies might be perhaps argued as the only configuration in which the global system could have settled in the course of its immense complexification. However, this interpretation, too, just like Teilhard’s outlook, should be qualified as contingent on contemporary circumstances. The particular current state of affairs does not therefore ultimately disprove Teilhard de Chardin’s long-term prediction. What it does reveal, nevertheless, is that Teilhard’s predictions lacked the conceptual perspective that was later introduced by complexity science and the
research field of complex adaptive systems (Holland, 1992; Heylighen, 1999, 2018; Borghini, 2021). Namely, they lacked the theoretical understanding which demonstrates that an increased interconnectivity of humanity does not need to be necessarily synonymous with a cultural, political, and spiritual unification. Rather, an increase of interconnectedness can occur through simultaneous processes of differentiation and integration (Heylighen, 1999, 2018), both of which are intelligently adaptive.

Even more problematically from the perspective of the interest of this essay, the trajectory drawn by Teilhard de Chardin is not only presented as irreversibly converging towards unification, but is also envisioned as doing so in response to the pull of a singular and ever-present attractor, termed the Omega Point.

Teilhard writes:
By its very structure the noosphere could not close itself either individually or socially in any way save under the influence of the centre we have called Omega. [...] The possible, or even the probable, repercussion of this conclusion, however theoretical in the first approximation, upon experience will now be obvious. If Omega were only a remote and ideal focus destined to emerge at the end of time from the convergence of terrestrial consciousnesses, nothing could make it known to us but this convergence. At the present time no other energy of a personal nature could be detected on earth save that represented by the sum of human persons.

If, on the other hand, Omega is, as we have admitted, already in existence and operative at the very core of the thinking mass, then it would seem inevitable that its existence should be manifested to us here and now through some traces. To animate evolution in its lower stages, the conscious pole of the world could of course only act in an impersonal form and under the veil of biology. Upon the thinking entity that we have become by horninisation, it is now possible for it to radiate from the one centre to all centres-personally. Would it seem likely that it should not do so?

Either the whole construction of the world presented here is vain ideology or, somewhere around us, in one form or another, some excess of personal, extra-human energy should be perceptible to us if we look carefully, and should reveal to us the great Presence. (Teilhard de Chardin, 2018)

Being a catholic priest, Teilhard de Chardin had of course the cultural licence—and even an intellectual obligation—to think in eschatological and theological terms and to seek agreement between his metaphysical system and his theoretical work. However, for our current context and approach, the particular hypothesis of the agency of the Omega Point is a hypothesis I opt to do without.

Finally, one more point of a psychological and almost anecdotal nature should be noted about Teilhard’s depiction of the noosphere: the aspect of his personal poetics. Thinking in images and metaphors, and writing in a visionary rather than philosophical way, Teilhard de Chardin infuses his descriptions with an idiosyncratic imagery that may be far from universally appealing. In one of his books, he reflects on his most treasured aesthetics in these words:
I was certainly not more than six or seven year old when I began to feel myself drawn by Matter - or, more correctly, by something which ‘shone’ at the heart of Matter.

[...] I withdrew into the contemplation, the possession, into the so relished existence, of my ‘Iron God’. Iron, mark you. [...] I cannot help smiling, today, when these childish fancies come back to my mind; and yet I cannot but recognize that this instinctive act which made me worship, in a real sense of the word, a fragment of metal contained and concentrated [...]

The real point, however, is: Why Iron? And why, in particular, one special piece of iron? (It had to be as thick and massive as possible.) It can only have been because, so far as my childish experience went, nothing in the world was harder, heavier, tougher, more durable than this marvellous substance apprehended in its fullest possible form... Consistence: that has undoubtedly been for me the fundamental attribute of Being. [...] this primacy of the Incorruptible, that is to say of the Irreversible, has never ceased, and never will cease, indelibly to characterize my predilection for the Necessary, the General, the ‘Natural’ [...] Already this was the Sense of Plentitude, sharply individualized and already seeking for satisfaction in grasping a definite Object in which the Essence of Things could be found concentrated.

It was precisely what, after many years of experience and thought, I was to begin to discern in an evolutive Pole to the World! (Teilhard de Chardin, 2016)

To my mind, the above fragment makes it apparent that some of the properties of the noosphere as they were presented by Teilhard would have been very different, should the dominant aesthetics of the author’s imagination and intellect be, for example, ephemeral, dispersive, or fluid, rather than fascinated by solidity and condensation. Teilhard’s forecasted trajectory of the noosphere’s development would have been also different, should the historical moment in which he was writing be of a converse socio-political dynamic, or if the author’s religion was differently orientated. Teilhard’s concept of the noosphere cannot be easily distilled from the historical, spiritual, and stylistic contexts of his writings; these were the threads of which the concept was woven.

While the above statement is applicable to any product of human thought, as all these products are historically, culturally, psychologically, and metaphysically informed, a careful disentanglement of such influences is particularly important when a conceptual transfer is performed between distinct genres of writing. Not all
constructs of thought that are permissible in a metaphysical, or philosophical work can make their way into a scientific theory. This is why the scientific reception and elaboration of the idea of the noosphere typically focuses on the most empirically discernable processes which compose the human sphere, such as the evolution of information and communication technologies and the changing patterns of information processing.

However, in our exploration of how far into the methodological way of thinking we might be able to venture in respect to the noosphere, we need to try and understand a view ‘from within’ the practice that makes up the noosphere. If Teilhard’s ‘reflective coiling’ of consciousness is to be seen as an intentional practice, and if there might be not only a reflection on ‘how?’, but also an awareness of ‘why in this way’, which orients and directs that practice, where is the agency which asks and answers these questions?

3. Situating the agency

There are at least several distinct ways in which the noospheric agency might be attributed. Our most intuitively preferred one is likely to be consistent with the philosophical stance which underpins the Western civilisation: that of humanism. Following this stance, we will likely attribute the intentional agency of making up the noosphere to the human being—each and every one. By the human being we will mean a human person, taken socio-philosophically and culturally, rather than the mere human organism. However, as straightforward and ethically sound this attribution might be, it can become conceptually problematic in multiple ways.

The first problem inherent to the conceptual attribution of the noospheric practice simply to human beings, or human persons, is revealed in the very existence of these two categories instead of one. If our preferred agency attribution is not universally indisputable, but is informed and refined by a philosophical stance which underpins our civilisation, does this not point to that philosophical stance as a principal agency which calls forth and authorises the individual agent? Studying
this problem from anthropological, sociological, political, and cultural perspectives we will realise that the attribution of personhood and agency across cultures and throughout centuries is far from homogenous. While for a Western thinker an attribution of the primary agency to a worldview, doctrine, or some other social construct, and seeing this construct as a power that brings forth an individual human being rather than the other way around, might be difficult to accept, it is certainly not the case for thinkers from other, non-Western contemporary backgrounds and cultures. In fact, the various agency attributions seem to be the cornerstone choices which make civilizations different from one another and self-coherent. For example, the architect of the political doctrine of contemporary Russia, Alexander Dugin, presents to his public a range of candidate historical subjects of humanity, including a non-subject or pre-subject in terms Husserl’s (1970) *lifeworld* and Deleuze and Guattari’s (2004) *rhizome*, or Heidegger’s (1962) *Dasein*, which describes being or existence. Having considered several different conceptual possibilities of such kind, Dugin concludes that the Fourth Political Theory should establish its subject as a hermeneutical circle which moves between all of them and institutes itself as a ‘Fourth Nomos of the Earth’ (Dugin, 2012). Such examples make apparent the significant cultural arbitrariness inherent to the attribution of the intentional human agency simply and directly to the human being. Viewed anthropologically, the Western choice is far from universal—ethically advanced as it might be.

The attribution of the noospheric agency to the human being *ut totum* creates also another problem, which requires theoretical resolution. This second problem is a direct derivative of our current line of investigation: it is the question of the demarcation between the noosphere and the biosphere. In seeking to precisely situate the locus of agency which differentiates its own constitutive processes from within the biosphere by the means of its conscious activity, we cannot simply point to a group of agents whose different aspects of functioning make them belong conjointly to all layers of our planetary existence, not solely to the noosphere. In abiding by the laws of physics, for example: gravity, human beings display behaviours analogous to all other forms of the geosphere: rocks, water, air, et cetera.
In sustaining an autopoietic operational closure (Maturana & Varela, 2012) while co-maintaining the state of equilibrium with the entirety of the organic matter on the planet, humans partake in the biosphere. On the other hand, if shareability of cognitive processing by the means of communication may be taken as the hallmark feature of the noosphere, we would be walking on increasingly shaky grounds in claiming that the borderline from which the noosphere begins runs sharply along the boundary between humanity and all the other lifeforms. The conceptualisations and evidence gathered by the fields of biosemiotics (Favreau, 2010), biosemantics (Millikan, 1989), biocommunication (Witzany & Baluška, 2012; Witzany, 2014) appear to suggest otherwise.

Simple as it might appear, therefore, the delineation of the noospheric practice by the category of agents that carry this practice out does not seem to be satisfactory and correct. Such a delineation would be perhaps analogous to attempting to explain the uniqueness of the biospheric existences by speaking of them in the categories which were developed to capture the non-organic processes of the geosphere. Understanding of the biosphere requires unique means of conceptualisation of life, its evolution and species, even though life and its species remain structurally deeply intertwined with the geosphere—for example: its constituent hydrosphere. Analogously, conceptualisation of the noosphere calls for categories capable of distinguishing the uniquely noospheric activity from everything else.

One good solution for this problem of delineation, which I propose to build upon henceforth, is offered by the philosophical shift from object ontology to process ontology (Heylighen, 2011b; Lenartowicz, Weinbaum & Braathen, 2016). Instead of grouping together the uniquely noospheric agents (e.g. human beings and their cognitive extensions and artefacts), we can thus identify uniquely noospheric processes, or cognitive events, and trace them irrespectively of the nature of the agents who enact them. To be able to theorise such noospheric events clearly, we need to understand how and when they depart from the logic of the biologically structured cognition.
4. The event of the noosphere

For the clarity of theoretical understanding of how and when the events of the noosphere depart from the biologically structured processes of cognition\(^4\), let us now attempt a definition of the noospheric type of events.

Reinterpreting the original ideas of Teilhard de Chardin in the prism of contemporary studies at the intersection of evolution, complexity and cognition (Heylighen, Cilliers & Gershenson 2006; Heylighen, 2011b; Weinbaum, 2015; Lenartowicz, Weinbaum & Braathen, 2016), I propose to define a noospheric event, as:

\[
\text{an instance of a consciously contingent cognitive interiorisation.}
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While the ‘consciously contingent’ part of the definition—to the explanation of which I will return—addresses the differentiation from the biosphere, the ‘cognitive interiorisation’ aspect of the noospheric events can be observed within the biosphere as well. I consider here as ‘cognitive’ all processes that combine impression and expression of distinctions, irrespectively of the nature of the strata upon which these distinctions are being registered (impressed) and enacted (expressed). In that, the biological stratum of cognitive processing is only one among several other possibilities.

By cognitive interiorisation I mean an occurrence of:

\[
\text{an interrelation of one process of cognition (A) with another (B) such that it results}
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\(^4\) Tomas Veloz (2021) suggests that my conceptualisation of the noospheric event necessitates that the structure of a corresponding biospheric event should be introduced in analogous terms. A ‘structural equivalence between biospheric and noospheric events’—he writes—‘could justify their existence as distinct “layers” which are instantiated in a different, yet abstractly homologous way.’ I am leaving the question raised by Veloz open. While his commentary may be pointing to a promising research question for further theory making, it should be noted that each distinct layer of reality does not only structurally elaborate the already present abstract patterns, but it also brings about arrangements that are unprecedented. To my mind, the notion of the event of the noosphere aims to capture an appearance of a latter kind, which however does not preclude that searching for an analogy proposed by Veloz might indeed prove fruitful.
in the complexification of the range of sensibilities of the Process A by the inclusion of the range of sensibilities which were previously not available to the Process A but were available to the Process B.

This kind of an interrelation occurs whenever one instance of cognitive processing—that is a dynamic, expressive process, not a static outcome of a set of distinctions having been cognised—comes to rely on another instance of cognitive processing (likewise: a dynamic process) by the means of the inclusion of one dynamics of expression as an integral aspect of the other.

The biospheric examples of such cognitive interiorisation include:

- An organism’s behaviour (Process A) being continuously informed by the ongoing processing of stimuli that is internally expressed by its nervous system (Process B).
- A range of sensibilities of the nervous system of the offspring (Process A) being continuously informed by the range of sensibilities of the nervous system of the parent (Process B).
- Perception of a member of a flock (Process A) being continuously informed by the behaviour of neighbouring members (Process B), etcetera.

As we can see, in and of itself cognitive interiorisation is a common arrangement within the biosphere. Yet, providing that the term ‘cognitive’ is understood in the abstract manner introduced above, an analogous mechanism of cognitive interiorisation can be observed as constitutive to the emergence and complexification of the noosphere. Indeed, I propose that the notion of cognitive interiorisation captures the core dynamism behind the ‘reflective coiling’ and ‘phyletic circumflection’ of consciousness, as described by Teilhard de Chardin (see the quotes in Section 2 above).

Let us consider the example given by Teilhard (1947):
‘[...] how can we fail to see the machine as playing a constructive part in the creation of a truly collective consciousness? It is not merely a matter of the machine which liberates, relieving both individual and collective thought of the trammels which hinder its progress, but also of the machine which creates, helping to assemble, and to concentrate in the form of an ever more deeply penetrating organism, all the reflective elements upon earth.

I am thinking, of course, in the first place of the extraordinary network of radio and television communications which, perhaps anticipating the direct syntonization of brains through the mysterious power of telepathy, already link us all in a sort of “etherized” universal consciousness.

Teilhard’s example of the mysterious ‘direct syntonization of brains’ via radio or television describes an event in which a Person X finds her- or himself in a position of being able to interiorise the manners of sensemaking of a Person Y, by the means of a technological transmission of their vocal expression. Thus, a range of cognitive sensibilities of Person Y is being made available for Person X to modify his or her own range.

This familiar, mundane human experience can be decomposed to a multitude of much simpler elemental events, each of which adhering at a different level of granulation to the general structure of our conceptualisation of the cognitive interiorisation. These simpler elemental events, one nested within another, illustrate distinct possible arrangements of the interiorisation of one cognitive process by another:

- Person Y, while speaking on the radio, continuously interiorises into the linguistic expression what he or she recalls considering important to be said.
- The composition of each uttered sentence interiorises the pre-structuration of meaning into words and their relationships, as it is being done within the given language, culture, and worldview.
- Each next sentence uttered by Person Y grammatically and semantically indexes the grammatical and semantic means of expression which has been already employed by the previous sentences.
• The technological system of the radio differentiates signal from noise and interiorises the signal into the transmitted broadcast.

• Person X, while listening to the radio, attends to the sensibilities which are being made available to him- or herself by the linguistic expression of Person Y and incorporates some of them into his or her own range of cognitive sensibilities.

It is apparent that any seemingly straightforward human happening will soon prove endlessly intricate, if we attempt to decompose it into such granular (arbitrarily outlined) events of cognitive interiorisation. As long as we can conceptually delineate any process (A) that is expressive of distinctions, and as long as we can delineate another one (B) whose dynamics becomes reflected in the manner the A unfolds, we may consider this pair of processes to constitute yet another instance of cognitive interiorisation that is occurring within the scope of our interest.

The examples above demonstrate that a biologically observable cognitive processing which is either performing the interiorisation or whose dynamics is being interiorised is only one among several other possibilities. These other possibilities include psychic (e.g. phenomenological), semiotic (e.g. linguistic), and technological (e.g. cybernetic) processing, among others. Even though the difference between the biological modality and any other could be further theorised here, in itself it seems to be too weak, however, to be considered as the borderline between the biosphere and the noosphere. This is because a sole biologically observable enactment, such as for example loudly exhaling instead of responding to a question, or stroking someone's hair, may be oftentimes quite enough for a noospheric event to occur.

For that reason, the proposed definition of a noospheric event may apply to any instance of cognitive interiorisation, irrespectively of the modalities of expression involved, as long as a second—logically sufficient—condition is met. This second condition is that the interiorisation would be consciously contingent, that is: intentional. While all events of evolutionary variation, including the variations in
the domain of cognition, are arguably always at least partially contingent (Blount, Lenski & Losos, 2018; Nobre, Tobias & Walker, 2010; Barrett, 2009), by an event that is **consciously contingent** I mean:

> an instance that could have been different or could have not occurred at all and is registered as such within the scope of cognitive sensibility of the very cognitive process (A) which conducts the interiorisation.

In other words, for an instance of cognitive interiorisation to qualify as a **noospheric event**, in the course of internalisation of the range of sensibilities that are available to the Process B, the Process A must be actively registering the viability of an option in which the internalisation would not have occurred, or would have occurred in a different manner. Notably, the contingency of interiorisation can be cognitively accessible to and operable by the Process A, only if the Process A is complex and self-reflective enough to be capable of a significant inner differentiation of its sensibilities and dynamics.

### 5. Conclusion towards a systematic methodological exposition

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5 Weaver D.R. Weinbaum (2021) comments on this inner differentiation in these words: ‘Reflective conscious incorporation means the temporary doubling of agency at the instance of incorporation. One agency is the one actually undergoing the incorporation while the other one reflects on the process as if from the outside which turns the knowledge acquired into self-knowledge, that is, an informed update of identity. For example, the knowledge involved in learning to actually drive a car may become complemented by acknowledging oneself as a driver (e.g., good driver, bad driver, etc., as additional qualifications). The presence of reflective consciousness as described here, also indicates a novel kind of availability, that is, the expansion of agency beyond the boundaries of the here-now instance, and towards counterfactual instances (viability of options...) where incorporation does not occur, or it occurs differently. With this, reflective consciousness opens additional dimensions of selection that are not apparent in the original instance. (This is the clarification of the importance of arbitrariness). Additionally, conscious incorporation necessarily involves active interpretation which may augment or deteriorate the incorporated content but mostly it relates the incorporated content to a different ground of sensibility - that of the incorporating agent. Finally, conscious reflectivity, and further, conscious interactivity where more than one agent is involved clearly expands the event beyond the locality of the context thus qualifying the event as noospheric.’
Unless a conscious registration of contingency is the case, I suggest, the interrelating of cognitive processes in various strata—for example, via behavioural mimicry and social learning in organisms, or different forms of self-organisation (Heylighen, 2008) and synchronisation (Strogatz, 2012)—may qualify as processes of cognitive interiorisation, but not yet as noospheric events. Following from that, an instance of a fully automated interiorisation performed by a technological or cybernetic agent for example, the radio system which differentiates signal from noise and transmits the signal, will not be considered as a noospheric event as long as that system does not register the arbitrariness of its own performance. When all arbitrariness is being resolved by a designer or an operator of a system, but is excluded from the cognitive registration by the technological system itself, we should rather identify as a noospheric event the interrelation between the activity of the radio system operator and the activity of the broadcasted speaker, or between the activity of the designer and the activity of the speaker, while treating the interrelation between the radio system and the speaker as an instance of an automated cognitive interiorisation that is included in a noospheric event as its substrate process. This distinction may allow us to theorise the distinctly expressive strata of human reality, such as the semiosphere (Lotman, 1990; Lenartowicz, 2017), the technosphere (Herrmann-Pillath, 2018), and the cybersphere, as the substrate layers of the noosphere proper.

Connecting this thread to the previously discussed problem of the delineation of the noosphere and to the possibility of defining its boundary by tracing the uniquely noospheric events rather than specific categories of agents who enact these event, it should be explicitly considered that many of the processes of interiorisation that are cognitively accomplished by human beings actually do not fit the definition of a noospheric event as I have proposed it. Many aspects of

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6 While largely overlapping, the technosphere and cybersphere are in my understanding different in that the technosphere encompasses configurations in which a cognitive affordance can be mediated between cognitive agents via a transferable tool, whereas the notion of the cybersphere refers to configurations in which the affordance is enacted by a cybernetic (control) mechanism. While many existing configurations will simultaneously qualify as both a tool and a cybernetic mechanism, not all tools are cybernetic and not all cybernetic mechanisms are tools.
human socialisation and habit formation are either imposed and construed as choiceless, or are performed subconsciously, without becoming cognitively registered as instances in which an arbitrary choice could have been made. This last point makes the problem of delineation sensitive and particularly so if the notion of the noosphere is used interchangeably with the notion of humanity. It follows, therefore, that if my proposed definition of the noospheric event is to be used as a conceptual means to delineate the noosphere, the interchangeability of the notion of the noosphere with the notion of humanity, as an ontological entity, turns ethically unacceptable. The ‘noosphere’, in this context, must be clearly understood not as another name for the human race, but for an aspect of humanity. The noosphere is something that humans do.

What is it, then, that humans do? Rewording the original ideas of Pierre Teilhard de Chardin in contemporary academic terms, I have proposed an understanding of the collective operation of humanity—termed the noosphere—as an ongoing interrelating of cognitive processes: an interrelating which progresses through a particular kind of event. I have defined these noospheric events as instances of consciously contingent cognitive interiorisation. I suggest that such rewording allows us to address the question of this essay quite precisely. If the occurrence of any noospheric event requires that it is consciously contingent, which means that the arbitrariness of its happening becomes registered by the very process which conducts the interiorisation, it can be said that any such process immediately rises to the status of an agency that sponsors and directs this particular episode of noospheric complexification. In that, we can indeed see this agency as excellently poised for a deliberate methodological consideration. Since it registers the interiorisation as optional, it can resolve whether or not to perform it. Since it is aware of the arbitrariness of the manner in which the interiorisation might possibly unfold, it can select what to interiorise and how, as well as what to exclude and in what manner.

The guiding question of this essay was whether the sum of processes that are generating the noosphere—the multitudes of diversely oriented long-term
trajectories, the minute singular happenings, the myriads of practises and actions large and small—can be seen as oriented by a methodological direction. Investigated one by one, human practises certainly display various degrees of intentionality and deliberateness, which often leads them to develop highly sophisticated methodologies. The strategy and tactics of war, treating cancer, playing cello, raising children, constructing submarines, baking chocolate cakes... Others are more implicit, but nonetheless shareable and learnable, at least to some extent. The practice of being a good friend to Jane, the practice of being a good friend to Joe, the practice of writing poems like Amanda Gorman, speaking up like Greta Thunberg, making plans like Elon Musk... If we attempted to compile a systematic exposition of know-how which has been developed relative to each of such a potentially learnable practice of humanity, a whole library of volumes might be needed for the table of contents alone. In as much as it develops a unique set of sensibilities and a unique pattern of expressivity, each such practice becomes a pattern of cognitive processing that may become cognitively interiorised by other agents. It becomes available as a potential source of complexification to the endless progression of practises and minds.

Can this availability be abstracted to an underlying blueprint that would be equally applicable to the practises that are contradicting, opposing, and cancelling each other out, as they are to the ones that harmoniously complement and reinforce one another? Is there, in them, another blueprint at play other than the one that governs the evolution of the biosphere? In his cybernetic definition of life, Bernard Korzeniewski (2001) proposed to understand the workings of the biosphere as a network of inferior negative feedback loops being subordinated to a superior positive feedback, one that governs expansion. The negative feedback mechanisms are essential for biological differentiation, for informing cognitive systems with boundaries and membranes of organismic existence. The noospheric process of interiorisation, of willingly keeping one another in mind, taking the viewpoints of others into account, learning their songs and stories, and elaborating on their crafts, adds to the cybernetically self-sustaining game of cognition a different, ever more inclusive, reflective spin.
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7. Bibliography


