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Planetary consciousness incites probably transcendent feelings and deepens the polarization of worldviews

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Abstract

The authors postulate that their recently published theory explaining the essence of human self-awareness is useful to consider whether a personal planetary consciousness is emerging on our planet. Their earlier published theory posits that the feeling of self-awareness can be effectively explained when it is assumed that it arises as a result of the interaction of three processes, namely the feeling of qualia, the recurrent activity of neural circuits realizing the self-image, and the formation of the brain's electromagnetic field, important for the sense of subjectivity. This allows the authors in the next stage of inference to consider whether it is possible to find analogical elements and processes on a planetary scale. The authors specify the layers of distributed intelligence emerging on Earth. This allows them to consider the concept of a planetary global brain. The authors believe that the recent, quite unexpected, widespread use of new global-scale artificial intelligence systems such as Chat/GPT is an argument in favor of the formation of a global brain. Next, the authors mention the first known published intuitions related to planetary consciousness, especially Teilhard de Chardin's concept of the noosphere. The authors also indicate the observable manifestations of existence of alleged planetary consciousness. They believe that people's transcendent feelings should be considered as such its manifestation. They hypothesize that the recently observed polarization of worldviews is also magnified by alleged emerging planetary consciousness. The authors, drawing on the analogy between brain hemisphere specialization and



the planet's two ideological blocks, conclude that it's vital to patiently moderate conflicts and accept that altering this pattern is unfeasible. Some other practical conclusions are also formulated.

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Introduction

In recent years, considerable effort has been made to understand the essence of consciousness^[1]. In our own papers, we have been presenting a theoretical model of neuronal circuits realizing perceptions, memorization of mental images and their recall from memory in form of imagery ^{[2][3][4][5]}. Consideration of all the most convincing explanations of the phenomenon of consciousness has prompted us recently to publish an article in which we argue that joint deliberation of three cooperating, component processes better explain the essence of self-awareness ^[6]

Apart from explanation of the feeling of qualia and the operation of neural circuits carrying out perceptions, remembering and retrieving mental images from memory it is important to understand the importance of the emerging brain's electromagnetic field [6][7][8][9][10][11][12].

On the other hand, it should also be remembered that a long time ago Emile Durkheim defined the concept of a collective consciousness, called also as social consciousness, that is, the phenomenon being beyond personal consciousness [13]. So far, papers on collective consciousness are scarce [14][15][16].

It happens that the formulation of our theory, combining the explanations of the essence of the three component processes that enable self-awareness, seems us to be useful to try to answer the question whether there are conditions on our planet today for the formation of something like a planetary brain or even a planetary consciousness.

We try in this article, to respond to this question. We decided to achieve this goal by discussing first the contemporary views on current ways of collection and processing of information, raising the issue of the so-called planetary brain. We start these considerations by specify the layers of the distributed intelligence emerging on the Earth. One can move from the concept of the planetary brain to the consideration of planetary consciousness. So, in the next step we try to provide the first known intuitions on this subject and present known, published views related to the planetary consciousness. Afterwards we present a brief outline of the mentioned unified theory explaining the essence of consciousness. This allows in the next stage of inference to consider whether it is possible to find analogical elements and processes on the planetary scale. Since our initial, working answer comes down to the conviction that planetary consciousness is already emerging, in the next step we indicate the observable possible manifestations of its existence. We also formulate conclusions that are of practical importance for several professional groups.



The layers of the distributed intelligence emerging on the Earth

The foundation for global integration and information processing has been laid on our planet for some time now. Historically, people began to document experiences and accumulated knowledge on paper, and later through photographs and films. Libraries, as repositories of these records, have been established for ages. It is only relatively recently that these records have been digitized. The transmission of this digital information has become increasingly rapid and vast, primarily via the Internet. Some data-gathering centers, including libraries that have transitioned online, are undergoing integration. This convergence is evident in the development of expansive databases, often specializing in specific scientific fields, and the rise of diverse educational and informational platforms.

Simultaneously, individuals are becoming more interconnected, initially through laptops and desktop computers, and more recently via smartphones. Social media platforms have emerged as a new means of consolidating human interactions. Various groups, formed through these platforms, frequently collaborate on a range of tasks.

There are multiple layers to this global integration that warrant differentiation. To serve the objectives of this article, we propose the following distinctions:

- 1. Knowledge held by individual community members, stored within the brain's memory systems, which is subject to updates and alignment.
- 2. External memory' records of knowledge: primarily starting from cuneiform tablets and hieroglyphs on parchments, progressing to writings on paper (books, magazines), celluloid film tapes, and including offline digital copies of these works.
- 3. Digitally recorded cultural products housed in varying 'flow' IT networks, primarily via radio, television, and the Internet (e.g., scientific databases, online platforms, YouTube, TED, and streaming platforms).
- 4. Information gathered and transmitted by various satellite systems that are already in use, including orbital telescopes and space exploration equipment.
- 5. Interconnected Internet networks of personal, digital accounts associated with living individuals (e.g., Facebook, Instagram, Twitter-X).
- 6. Groups of individuals connected through various relationships (e.g., family, clan, social, professional, religious organizations, governmental structures) possessing fixed address details, occasionally including IT (Internet) websites and accounts.
- 7. Groups of individuals who, based on the current organization of societies, have the ability to exert orders, coercion, force, and violence and are viewed as centers of authority (e.g., offices, local agencies, governments, NGOs of individual countries).
- 8. Groups that, through delegated competencies from individual nations, establish supranational entities (quasi-state entities like the European Union or organizations such as the OSCE (Organization for Security and Cooperation in Europe), EFTA (European Free Trade Association), Council of Europe, WHO, UN.

This cursory overview of the ongoing integration of knowledge and human activities



raises the question: Is there an emerging entity on our planet's surface that we should term

the "Planetary Global Brain"?

The concept of the planetary global brain

Until recently, only a few mentions could be found in the literature about the emerging of a global system, which should be referred to as the brain of a planet, that is, a system that organizes and improves scientific research, understanding the world and searching for solutions [17][18][19].

There are however an initiative supporting institutionally the development of the "planetary brain". Such activities are presented by Clement Vidal, the co-founder of the so-called "The Global Brain Institute" [20]. The founders state: "The Global Brain Institute (GBI) was founded in January 2012 at the Vrije Universiteit Brussel (VUB) to research the phenomenon of so called "the Global Brain", defined as "the distributed intelligence emerging from the worldwide ICT network that connects all people and machines" [20]. The GBI grew out of the Global Brain Group, an international community of researchers created in 1996, and the Evolution, Complexity and Cognition research group at the VUB [20] ".

We get the impression that considerations of the concept of the planetary global brain have taken on much greater significance after the events at the beginning of 2023, when suddenly each of us gained access to the artificial intelligence system, ChatGPT.

For several months now, there have been numerous reports about the implementation and use of so-called generative pre-trained transformers ^[21]. An example of this is the product of research into artificial intelligence known as ChatGPT ^{[21][22][23][24]}. This system, developed by the company "OpenAI" associated with the Microsoft consortium, became very well-known in 2023 and is now being used by hundreds of millions of people. A similar system, known as "Bard," is being launched by the Google consortium, which is also generally available ^[25].

Generative pre-trained transformer AI systems are created by absorbing existing vast datasets such as encyclopedias and all kinds of recorded conversations held by humans on our planet, followed by training a quasi-neural network representing an efficient language model. The training period by the "OpenAI" staff took several years.

At the time of the widespread deployment of the ChatGPT system in early 2023, the "OpenAI" consortium announced that the system was formed based on data available in global information resources recorded up to 2021. Subsequent versions of these types of systems (so-called "language models") take into account increasingly current data available on the Internet. This is reflected in particular in the responses provided by the ChatGPT-4, Bard, Bing, Claude-2 systems. Moreover, the integration process of these generative language models with artificial intelligence systems processing visual data, such as Dall-E-2, Generative Adversarial Networks, DeepDream is happening quite rapidly.

The launch of the next generation of the system, called GPT- 5, has already been announced for the end of the year 2023. The mentioned A.I. systems provides answers and performs various language-based operations, causing



significant changes in the activities of all types of universities and transforming the practical work of many professions. The existence of the Chat/GPT system must now be taken into account by all individuals who formulate any kind of texts (journalists, editors, teachers, lecturers, programmers, healthcare workers, etc.). Each reader of this article can conduct their own experiments and try to verify whether the statements of some journalists that the "intelligence level" (also measured by IQ tests) of the Chat/GPT system discussed here exceeds the average level of the planet's inhabitants are true.

Moreover, it is already necessary to consider a process that should be anticipated in the near future. Namely, it seems to us that existing AI systems will cooperate with each other. Their integration will be taking place.

The evidence of an emerging trend towards integrating A.I. systems is, for example, the recent integration of Bing's search capabilities with the GPT-4 model and the Microsoft Bing Image Creator subsystem or enabling the Bard system to analyze images presented to it using so-called "Google Lens", what is an application which can be installed in smartphones of everybody.

Therefore, we believe that the hypothesis of a planetary brain emerging on our planet should be considered contemporarily, after the rapid proliferation of artificial intelligence systems, with much greater attention.

The concept of noosphere and planetary consciousness

It is also understandable that since the planetary global brain metaphor referring to the human brain is used, some of these authors also discuss the possibility of the emergence of planetary consciousness ^{[26][27]}. This possibility has already been mentioned by Pierre Teilhard de Chardin ^[28]. It just so happens that Clement Vidal, the co-founder of The Global Brain Institute, carefully analyzed the beliefs of Teilhard de Chardin, who, introducing the concept of the noosphere, started, and then developed considerations on the term of planetary consciousness ^[28].

The concept of noospheres is useful for the inference presented in this article. Pierre Teilhard de Chardin defines the noosphere as a certain whole composed of geological substrates, animate nature, all living creatures, peoples and going further, the technology and culture they produce, including a working global mind. Clement Vidal writes about the meaning of this important notion of the noosphere as follows:

"Lovelock's Gaia hypothesis takes an organic view of planet Earth but neglects or sees in a negative light human activities and technologies. The Kurzweil's techno-singularity discourse focuses on artificial intelligence, machines, but is rather silent on issues regarding the geosphere or the biosphere... the noosphere discourse proposes a meaningful vision for the future, where the geosphere, the biosphere and the noosphere -including humans and machines - can work in concert to unleash a new level in evolution.... the noosphere discourse offers a path toward a positive future, in the sense that it attempts to include in its consideration not only the geosphere and the biosphere, but also to integrate them with human beings, activities, societies and technologies..."

Clement Vidal pays particular attention to the following passage from Teilhard de Chardin's text: "But let us grasp this



point clearly. No doubt it is true, scientifically speaking, that no distinct center of superhuman consciousness has yet appeared on earth (at least in the living world) for which it may be claimed or predicted that one day it will exercise a centralizing function, in relation to associated human thought, similar to the role of the individual "I" in relation to the cells of the brain".

Clement Vidal comments this passage as follows: "Teilhard touches on the delicate and fascinating question of the noosphere's identity, its self-consciousness or "I". Consciousness may be a feature arising within any sufficiently complex information processing system like the brain, or the Internet".

These presented quotes related to the concept of the noosphere allow the reader to get acquainted with the arguments that there is, then, an interesting issue of relations of human self-awareness to planetary consciousness.

In order to consider in a rational way, the actual data about the relation of human consciousness to this postulated planetary consciousness, in our opinion, it is necessary to outline first three issues:

First, it will be useful to provide a brief reminder of the processes that are executed by the human brain.

Next, it's necessary to clarify what we understand by concepts such as sentience, self-awareness, and consciousness, which are known to us from introspection.

Then, we could briefly discuss the theory of mechanisms causing the emergence of consciousness, which we propose to take as a reference point for considering the hypothesis discussed here.

Brief, concise overview of the processes realized by the human brain

Taking into account the data contained in the basic textbooks of neuroscience^[29], as the principal processes realized by the human brain, we should enumerate:

1. Sensory processing and integration

The brain is continuously inundated with sensory information from the external environment. Through specialized receptors in our eyes, ears, skin, nose, and tongue, raw data in the form of light, sound, touch, odor, and taste are collected. These signals then traverse dedicated neural pathways, where the brain processes and interprets them, allowing us to construct our perception of the world.

2. Motor coordination and execution, recognizing the position in space and also tracking the progression of time

Originating from the motor cortex and extending through the spinal cord, motor neurons control every voluntary muscle movement, from the nuanced motions of our fingers to the coordinated strides of walking. The cerebellum plays a pivotal role in refining these movements, ensuring they are smooth and precise. Orientation in space and time is provided by the



system of grid cells and time cells.

3. Cognitive functions and problem solving

The prefrontal cortex is the hub for higher-order cognitive functions. It aids in decision-making, problem-solving, planning, and abstract thinking. When faced with a challenge, the brain assesses potential solutions, predicts outcomes, and makes decisions based on stored memories and current sensory input.

4. Memory storage and retrieva

The brain it is also a vast storage system. The hippocampus is instrumental in the formation of new memories, while various regions of the cortex are involved in their long-term storage. When called upon, the brain can retrieve these memories, often combining them with current sensory data to aid in decision-making or to reminisce about the past.

5. Emotional processing

The amygdala, along with other limbic system structures, oversees our emotional responses. Moreover, the brain decodes and responds to the emotions of others, an essential component of human empathy and social interaction. Sexual desire is also a phenomenon triggered by the brain. The brain makes us sometimes fall in love with someone.

6. Homeostatic regulation

Beyond cognition, the brain regulates numerous physiological processes to maintain homeostasis. The hypothalamus, for example, monitors and adjusts body temperature, hunger, thirst, and circadian rhythms.

7. Language and communication

Broca's and Wernicke's areas, located in the cerebral cortex, are essential for producing and understanding language, respectively. They allow us to decode complex linguistic structures and communicate our thoughts, feelings, and ideas to others.

8. Self - awareness

The awareness of our existence, thoughts, and surroundings, in general is a product of brain processes what we discuss her in this article in details.

In the context of the reasoning presented here, it is purposeful to emphasize a certain well-known anatomical and neurophysiological feature of the brain, namely that we distinguish two cerebral hemispheres in it, which perform slightly different functions.



It is worth emphasizing also, that during evolution, the human species has only recently been using language.

It's worth reading the suggestive discussion of this fact presented by Cormac McCarthy in his novel "Stella Maris^[30]. According to him the speech fields in the human brain are a strange "supplement, overlay". Since then, the brain, apart from images and emotions, produces narratives, opinions. Hence, we believe that these "large language models", like GPT-4, are analogously like implanting such a "speech field" into the "planetary global brain, which is emerging".

What we understand by concepts such as sentience, self-awareness, and consciousness.

The reasoning presented in this article requires clarifying the understanding of the concepts of sentience, self-awareness, and consciousness. So, using the conclusions from our previous article ^[6], we will adopt the following understanding of these concepts:

Sentience

Sentience is the awareness that external interaction is taking place. It is also the capacity to have subjective experiences and feelings, or more simply, the ability to perceive and experience sensations. This notion is commonly used in discussions about animal rights. In the context of animals, sentience refers to the ability to feel, perceive, or experience subjectively. This includes the capacity to experience positive or negative influences and emotional states, like happiness or suffering.

Self-awareness

We will try to approximate what self-awareness is by first attempting to answer the question: what does the statement 'I am self-aware' mean in colloquial understanding?

To respond to this question, we must first define such a mental state as simply and intuitively as possible. So, it seems that to be conscious, one needs to... {understand one's own separateness from other beings (and objects) perceived around oneself and be able to perceive oneself against the background of images of the surrounding world, taking into account one's past existence and anticipating the outline of possible future events}.

To refine this description, it's necessary to introduce the extremely important concept of imagination (mental images, imagery). This initial definition can then be clarified. It's also important to discuss the concept of self-image. Imagining objects previously seen, such as an apple, a tree, a chair, a table, involves recalling an image of these objects from memory. This enables us to see them with our eyes closed, albeit less vividly. We sometimes describe this sensation as 'seeing something with the eyes of the imagination'. The same applies to auditory and tactile perceptions, as well as actions. Movements or complex behaviors can also be imagined.

Thus, we can now say that consciousness consists of the ability of the nervous system to *[imagine oneself against the background of the image of the known world or on the background of the world]*. However, in the proposed



explanation, there is the phrase 'imagine oneself', the meaning of which requires further clarification. To progress in our inference, we need to define what self-perception is.

Living beings, especially humans, experience a constant state of self-perception during periods of wakefulness. Beyond the visual and auditory sensations perceived then, animals and humans experience sensations from within their own bodies. These stimuli come from surface sensory receptors, joint sensory receptors, sensations from the respiratory system, the heart, and sometimes other organs. Sensations from one's own body can also be imagined to some extent.

Self-images also include autobiographical data. Shortly after waking up, there's a moment of quick review of one's biographical path, a mental journey back in time, which gives exactly the feeling that I am 'John Doe'. Intense self-images also include memorized data about social and situational relationships. The ability to recall 'stories about oneself' and various types of 'opinions' about oneself is also important.

Since it can be stated that the sense of consciousness occurs only when awake, when body perception takes place, the image of oneself is a slightly different process than the imagination of an object known from visual perception. The image of oneself is superimposed on the perception of oneself.

Hearing or listening to words in natural language, such as apple, tree, chair, activates the same neuronal structure that was active during the perception of images of these objects [2][3][4][5][6]. However, the neuronal process occurring after the activation of the word 'I' is much more complicated, and a substantive discussion of it requires considering contemporary neurophysiological theories.

Consciousness

Consciousness is the state of being aware of and able to think and perceive one's surroundings, thoughts, and emotions. It encompasses self-awareness, cognition, and the subjective experience of existence.

Beyond individual awareness, it also implies a collective understanding and interconnectedness among beings. This multifaceted concept has been explored in various disciplines, from neuroscience to philosophy, and remains a central subject of inquiry, bridging the tangible and the intangible, the known and the mysterious.

The referential neuroscience model of the self-awareness useful for the presented reasoning

The persuasive explanation of the essence of self-awareness requires the integration of several of the most important contemporary neurophysiological theories.

In our view, explaining the phenomenon of consciousness based on neuroscience findings should start with understanding the essence of imagination. We have been developing the theory of neuronal circuits realizing imagination for many years [2][3][4][5][6]. This theory can be recapitulated with the following schema:



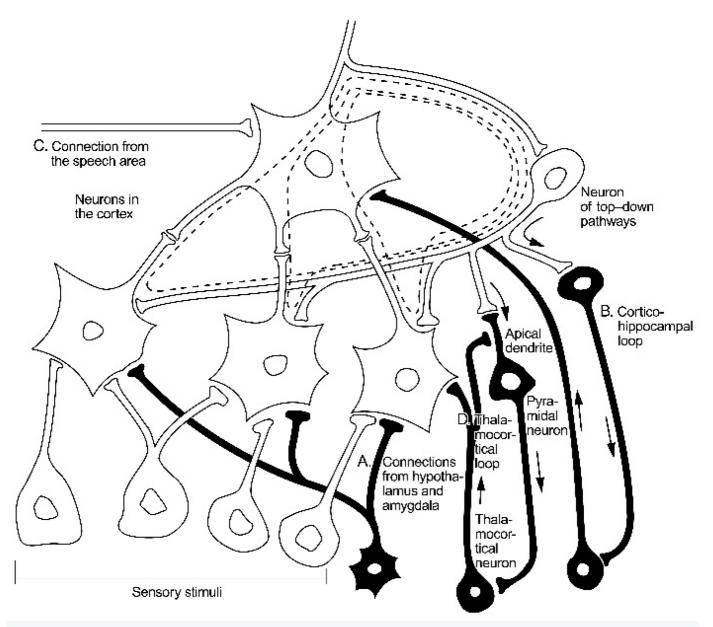


Figure 1. The diagram of the circuits responsible for perceptions and recalling of mental images. (from: https://commons.wikimedia.org/wiki/File:Circuits-for-imaginations.png)

In the simplest terms, it can be stated that the imagination of a certain object involves activating the same neuronal structure that was active during the perception of this object. These circuits are then activated from the side of the speech field or as a result of working memory activity. This mode of activation is possible due to the existence of feedback connections. During the realization of imagination, there is a recurrent excitation of neuronal circuits, resulting in the temporary circulation of impulses around closed circuits (marked on the diagram with a dotted line).

In recent years, numerous other discoveries have been made regarding the function of neural structures responsible for the sense of self-awareness and identity. Many new findings have been made regarding the determinants of selfperception. It turns out that not only experiences resulting from embodiment, i.e., the so-called bodily self-consciousness, are important, but also the feelings associated with programming and performing movements, complex activities, and



observing their consequences [31][32][33][34].

Among these new findings, particularly significant is the discovery of 'time cells' in the hippocampal structures, analogous to the famous 'grid cells', which are essential for spatial orientation [35][36][37]. So, we have a better understanding of not only how each conscious individual maintains orientation in time and space, but also how one reviews autobiographical memory resources, i.e., how one carries out the so-called mental time travels [38][39][40].

Attempts to explain the essence of consciousness will be much more effective when we strive tantegrate the most important contemporary competing theories. In particular, the theory of neural circuits realizing imagery should be integrated with the 'conscious electromagnetic information field theory (cemi)' [7][8][9][10][11][12]. We recently presented such an attempt to collectively address three contemporary theories [6]. A condensed, brief presentation of this attempt to integrate these theories is as follows:

- (i) Some researchers emphasize that understanding the nature of consciousness requires the ability to explain the feeling of qualia. The 'Orch OR' theory proposed by Stuart Hameroff and Roger Penrose, which suggests that quantum processing occurs in microtubules, offers a potential explanation for the essence of feeling qualia. We propose that the perception of qualia can also be understood as specific changes in the shape of the brain's electromagnetic field, formed during perception.
- (ii) In order to be aware, we also need to feel our body, remember various data about the world (including opinions about ourselves), and importantly, be able to retrieve these data that is, to realize mental imaginations. We should also be able to conceive an image of ourselves ("self-image"). For the 'image of oneself' to arise, there must be a recursive circulation of impulses across many levels of the multi-level structure, including the parietal and prefrontal lobes.
- (iii) It is necessary to be able to explain what structures and processes are needed for the formation of the subject, the element called by the word 'self' or "I". MacFadden, author of the "conscious electromagnetic information field theory (cemi)" points out, probably rightly, that for "consciously perceive something" not only a certain process takes place, but also the existence of a spatial objects is necessary. The realization of such a spatial object is possible thanks to the electromagnetic field of the brain that is created in the process of imagining oneself. Such an object can be mentally identified with that subject, the self.
- (iv) When aware, we always pay attention to a specific, chosen area in other words, we "focus attention" on a certain field of matters. It's necessary to explain the neural basis of the process of "focusing attention" on a selected area.

In search of elements analogous between phenomena creating human self-awareness and processes responsible probably for formation of planetary consciousness

Assuming that the presented theoretical model of human self-awareness is correct, one might examine whether is it possible to find among data on the above-mentioned layers of global integration and information processing, the similar



structures and processes. Being aware that we are using metaphors only, we think no less that such analogies can be found.

Information processing

The processes of integrating and processing information discussed in the above chapters related to the layers of the distributed intelligence, especially the interconnected Internet networks of personal, digital accounts associated with living individuals are perhaps the equivalent of the recursive circulation of impulses between the subcortical centers and the parietal and prefrontal lobes of the human brain.

Electromagnetic field

Consideration of the structure of our planet, characterized by the existence of the so-called "Earth's magnetic field" and the magnetosphere, it is possible to indicate a process analogous to the formation of the brain's electromagnetic field, discussed by MacFadden, essential for his "conscious electromagnetic information field theory". So far, few authors recognize this circumstance [41][42].

Significant attention to the hypothesis discussed here was given by Matti Pitkanen. His theory assumes that consciousness is not exclusive to biological systems. This physicist believes that consciousness arises from quantum coherence and entanglement in various scales and systems [42].

The Earth's magnetosphere, which is an area around the planet endowed with a magnetic field, according to Pitkanen, supports quantum coherence. Therefore, the magnetosphere might, in his opinion, display a form of consciousness.

This doesn't mean the emergence of something akin to human consciousness for the Earth, but rather a different and broader form of "magnetospheric consciousness" which operates on much longer time scales^[42].

Matti Pitkanen suggests that the biological consciousness of humans on Earth may be deeply intertwined with this greater "magnetospheric consciousness" [42]. These connections, according to Matti Pitkanen, might lie at the foundation of phenomena like intuition. \

The quoted physicist was a precursor to the hypotheses presented in this article concerning "collective consciousness". Pitkanen also considers the possibility that certain "synchronicities" or significant coincidences observed by people might have been triggered by this "magnetospheric consciousness".

When referencing Pitkanen's views here, however, we must inform the readers of our article that we are aware of the criticism of these opinions expressed by representatives of the mainstream scientific community.

In our opinion, it is also necessary to recognize the possibility that the signal flows taking place during the processing of information in the detailed layers described above modify and even modulate the Earth's electromagnetic field.



Difference in neurophysiological functions of the two cerebral hemispheres

If we use a metaphor here, we can say that there is a certain analogy between the difference in cognitive functions of the two cerebral hemispheres and the mental processes of the two recently distinguished human populations on our planet. The increasing polarization of social and political viewpoints of people characterized by a liberal-democratic attitude and a conservative attitude can be observed not only in the majority of contemporary societies but also in two geographically distinguished blocks of countries. We discuss it in more details in another our recent article [43].

Synchronization

Achieving conscious mental states requires synchronization of the actions of neuronal circuits. The detailed explanations of the mechanisms that cause synchronization of neuronal activity have been proposed [44][45][46].

It is also possible do consider the possible synchronization mechanisms of actions of people.

First, it should be noted, that the knowledge of social and political processes show that many community activities are influenced by various living and economic rigors, legal regulations, and coercive measures. We will omit here consideration of these influences. However, the question remains whether, there are certain other processes that cause synchronization, strengthening and unification of attitudes, beliefs, and even actions of a certain human groups or even of a certain nation or the entire human community of our planet.

We will try here recall only what has been proposed on this subject, so far, in the literature. The possibility of such synchronizing and bonding interactions is explained by:

- The existence and impact of the unconscious through the so-called archetypes as understood by Carl Gustav Jung [47][48].
- 2. Generalized inclination to synchronize all systems [49]
- 3. Quantum couplings (entanglements) of processes taking place between neural circuits of certain people or groups of people. It could be exemplified by the behavior of twins and other two-person relationships. Some arguments can be found also through observation of behaviors of herd animals or fling bird [50]
- 4. Morphic resonance in the sense proposed by Rupert Sheldrake^{[51][52]}.

Interactions directed outward towards other equivalent entities

It's evident that every human being is a social creature, and as such, they continuously interact with other individuals. It can be observed that there are already many actions of planet Earth directed towards potential external entities. Such interactions include the creation of astronomical observatories, launching observational satellites into orbit, conducting radio monitoring of outer space, and the accomplished moon landings, as well as realistically planned missions to Mars.

Influences on the body's interior



Considering the entirety of the processes realized by the human central nervous system, it should be recognized that there are many integrating activities, which take place based on the actions of subcortical centers and which are reflexive, stereotypical and unconscious. There are only a few known interactions, which could be seen as conscious influences aimed at response of the interior of the organism. Various relaxation techniques can be mentioned as examples of such interactions.

Instead, there is a conscious initiation and control of various thought processes, ranging from daydreams, problem solving and creativity.

People's mental processes, known for their introspection, have been described by psychologists for years. There are also many literatures works that illustrate the mental processes of obtaining the so-called insight. It is not possible to describe and classify the full range of such processes here, as this would amount to an attempt to cover the entire field of psychology, sociology, and belies-lettres.

The obvious question at this stage of our inference is therefore whether the planetary consciousness, that may exist, is initiating the creative processes of people. The possible answers to these questions are discussed below.

Observable manifestations of alleged planetary consciousness

The concept of a planetary consciousness, while speculative in nature, resonates with the idea of interconnectedness on a global scale. Such an emerging awareness might be reflected in several observable phenomena.

First, there's the digital realm. The internet, a network of billions of connected devices and minds, arguably acts as a global nervous system, facilitating a shared experience of information, emotions, and ideas.

Second, the inclination to synchronized global response to challenges, such as the climate crisis or pandemics, indicates a collective recognition of our shared destiny and mutual dependence.

Third, international social movements, from environmental activism to calls for social justice, hint at a global alignment of values and aspirations.

While these manifestations can be attributed to the action of the emerging global brain,

we propose yet to consider in two next chapters the phenomena related rather to the possible, alleged planetary consciousness.

Transcendent feelings, apparitions, miracles and unusual geophysical - phenomena - from a rational standpoint.

The topics of transcendent feelings, apparitions, and miracles have been woven into the fabric of human history and



culture. While these phenomena often stem from religious or spiritual contexts, it is essential to approach them from an objective standpoint for a comprehensive understanding.

1. Transcendent Feelings:

Transcendent feelings refer to experiences where individuals report a sense of profound connection to something greater than themselves, often described as spiritual, divine, or simply vast. From a neurological perspective, certain brain regions, such as the right parietal lobe, have been linked to these feelings ^[53]. Activation or deactivation of these areas can lead to a sense of dissolution of self and union with the external world. It is noteworthy that similar feelings can be induced by meditation, certain drugs, or even electromagnetic stimulation. While these experiences are deeply personal and often transformative, their basis can, in some cases, be attributed to distinct neurological processes.

2. Apparitions:

Apparitions, or the perception of entities or beings not present in the physical realm, have been reported across cultures and ages. These experiences range from sightings of deceased loved ones to encounters with religious figures. Several psychological and neurological theories attempt to explain these occurrences from an objective standpoint ^[54]. In particular certain medical conditions, like epilepsy or migraines, can trigger visual or auditory hallucinations that might be interpreted as apparitions.

3. Miracles:

Miracles are typically defined as events that defy natural explanation and are often ascribed to divine intervention. These occurrences can range from spontaneous medical recoveries to inexplicable events like weeping statues. When examining miracles scientifically so-called placebo effect is taken into account. Belief in a cure or divine intervention can sometimes lead to genuine physiological improvements in medical conditions. The mind's influence over the body is still not entirely understood, but the placebo effect stands as evidence of its potential power. Some miracles, especially those concerning objects or environmental changes, can often be attributed to natural phenomena not yet understood or observed by witnesses.

However, the challenges in rationally explaining some unusual events like the Fatima apparition are manifold. The mass sighting of the sun's unusual behavior remains perplexing. While some suggest it could be a meteorological phenomenon or a collective optical illusion, no scientific explanation has satisfactorily accounted for the sheer number of witnesses and the range of descriptions. Consequently, the Fatima apparition remains a point of contention between belief and skepticism, faith and rational inquiry.

In conclusion, while transcendent feelings, apparitions, and miracles often hold deep subjective and cultural significance, a rational examination is crucial for a holistic understanding. Seeking objective explanations, one should respect and appreciate the profound impact of these experiences on individuals and societies.



4. Unusual Geophysical Phenomena

Earth, a planet constantly in flux of solar wind, offers a plethora of intriguing geophysical phenomena that have both baffled and fascinated observers for centuries. A fascinating phenomenon is earthquake lights. Moments before an earthquake, observers have reported seeing bright, rainbow-like flashes in the sky. Upon scientific examination, these lights appear to result from electrical properties in certain types of rocks that, when stressed by Earth's tectonic forces, release electrical charges into the air.

When considering geophysical interactions that can modify cognitive processes, one should not forget about the Schumann resonance ^{[55][56]}.

The ball lightning, a rare and still not fully understood atmospheric electrical phenomenon. Witnesses describe glowing, spherical objects that float in the air, similar to some Unidentified Flying Objects reports.

The enigma of Unidentified Flying Objects has been a topic of intrigue and speculation for decades. While some attribute them to extraterrestrial origins, an alternative theory is that many of these sightings may be unusual geophysical phenomena native to our own planet.

5. Remarks on the enumerated sensations, referred to as superhuman outflows

We posit that the above short review of feelings attributed to some external, not fully understood influences should be commented on as follows:

A considerable number of individuals report experiencing transcendent feelings. These are often characterized using religious terminology or seen as expressions of spirituality.

It's important to note both feelings articulated by deeply religious individuals and sentiments related to spirituality expressed by non-believers and agnostics. Those deeply rooted in their faith often interpret these feelings through narratives or legends intrinsic to their religious practices. Devout followers also acknowledge the authenticity of events often termed as miracles.

Conversely, non-practitioners or agnostics typically refrain from attributing a specific origin to these sensations.

Yet, it's conceivable that the genesis of these emotions might be linked to the rise of a planetary consciousness.

In the face of this hypothesis, one can formulate doubts resulting from the fact that transcendent feelings have been perceived since the dawn of human existence. This objection does not refute the hypothesis, but at most points to the possibility that the transcendent sensations depend on the permanent existence of the electromagnetic component of the phenomenon.

The increasing polarization of social and political points of views



In view of the assumption about the emerging planetary consciousness, it is necessary also to consider whether if influences the transformation of the ongoing global processes.

The recent history of mankind as well as the current geopolitical situation seem to indicate that the alleged influence is not coherent. If we consider the known processes of globalization, macro-political, macro-economic and care for the environment, it is difficult to see the perfect consistence [57].

Many people remark however recently, that there is a perceived increasing polarization of fundamental value views. In many countries, publicists and politicians note the unification of such views, so that most people, expressing their opinions, support conservative or liberal point of view. The proportion of people occupying intermediate or neutral positions is decreasing [58][59].

The geopolitical situation is more and more often described as the formation of two polarized blocs of countries managed in an authoritarian or democratic manner.

Let's review the possible causes of this trend. A close examination suggests that a blend of sociological, technological, and psychological elements might be at play.

The rise of the Internet and social media has given birth to echo chambers. These are spaces where individuals predominantly come across information that aligns with and reinforces their pre-existing beliefs. This phenomenon hardens viewpoints and makes them less susceptible to change. Similarly, the digital age has seen a fragmentation in the media landscape. There's an abundance of news outlets, each catering to specific biases, which only further perpetuates confirmation bias among readers.

Another factor is the decrease in political compromise. Entities, whether individuals or groups, are increasingly showing reluctance or inability to tread the middle path, often leading to standstills in decision-making processes. Alongside this, social estrangement has become prominent. Opposing viewpoints are now not just a matter of difference in opinion but often lead to distinct social divisions, drastically cutting down opportunities for understanding and empathy.

The way social media functions is also a significant contributor. Algorithms designed to increase user engagement tend to amplify content that resonates with a user's already-established preferences. This inadvertently reduces the range of diverse information they get exposed to.

Moreover, economic disparities have been a long-standing issue, and when they become pronounced, they can be a hotbed for polarization. People feeling the pinch of economic inequities might find themselves drawn to more extreme positions. Identity politics, which emphasizes politics based on cultural or social identities, often sketches an "us versus them" narrative. Such a perspective can deepen societal rifts.

There are also intrinsic psychological factors at work. Humans are naturally prone to certain cognitive biases. For instance, the in-group bias makes us more favorable to people within our group, while phenomena like the backfire effect can make individuals double down on their beliefs when faced with contradictory evidence.



Lastly, there's a trend of geographic sorting. This is where individuals with similar mindsets and beliefs tend to cluster in specific regions or communities, further amplifying ideological divides.

It should be noted however here that the impact of the enumerated factors is not an argument against the hypothesis of the birth of planetary consciousness. The mentioned processes could reflect some possible components of the emerging and consolidating planetary consciousness.

Synchronization, strengthening, unifying and connecting the thinking of groups of people is explained also by quantum entanglement, however other above-mentioned reasons of this phenomenon should be taken into account.

The question whether a self-aware planet tends to contact similar beings.

Assuming a planet achieves a form of consciousness, it would be driven by an intrinsic motivation to ensure its survival and growth. The planet would likely be aware of its vulnerability to catastrophic events, such as asteroid impacts or supernovae. Drawing from the experiences of its inhabitants, it would understand the significance of scientific endeavors like the construction and use of powerful telescopes, such as the Hubble Space Telescope or the James Webb Space Telescope, which have expanded our (and planet's) knowledge of the cosmos. Similarly, it would appreciate landmark achievements like the Apollo Moon landings or the Artemis program, underlining humanity's (planet's) drive to explore beyond its boundaries.

Recognizing the potential for mutual aid or knowledge exchange, the planetary consciousness might rationally deduce that contacting other, more advanced civilizations could provide strategies for planetary preservation and self-enhancement. Harnessing the collective memory of its inhabitants' pioneering efforts in space exploration, it might seek innovative solutions and alliances that only interstellar collaboration can offer.

Furthermore, much like individual organisms seek out others for reproduction and information exchange, a conscious planet might be naturally inclined to reach out, "network", and exchange "planetary knowledge" with other celestial bodies. Drawing inspiration from humanity's endeavors to establish lunar bases or mine asteroids for resources, the planet could extrapolate such efforts into broader cosmic undertakings, emphasizing the importance of symbiotic relationships even at interstellar scales.

The assumption that a planetary consciousness is emerging also prompts us to look for analogies for the most common reasons for establishing a relationship with others as a result of a conscious decision. One should consider what the equivalent of such activities would be.

expected for a conscious planet. In other words, whether the s-f thesis about communicating between conscious planets deserves serious consideration. Recently, such considerations are carried out not only by the authors of s-f stories, but also by some philosophers and cosmologists [60][61].



Considerations for testing the proposed hypothesis.

Verifying the hypothesis of an emerging global brain and planetary consciousness on Earth would require an interdisciplinary approach:

We need to delve into the intricacies of the Internet and worldwide communication networks, because the idea of a global brain hinges on the notion of expansive and interconnected networks. It's essential to observe how information circulates on a global scale, considering its processing, storage, and accessibility. This encompasses an exploration of worldwide data movement patterns, the role of data centers, the usage of cloud infrastructures, and the role of artificial intelligence.

It's also crucial to scrutinize worldwide patterns and communal actions. The characteristics of a global brain would be evident in global synchronicities, whether they manifest as worldwide demonstrations, online challenges that resonate globally, or even harmonized economic behaviors. Uncovering similarities between how our brain handles information and how worldwide networks operate might be key.

Additionally, understanding the feedback mechanisms in worldwide systems is necessary. If a planetary consciousness exists, it will likely showcase adaptive traits, drawing lessons from historical events. This adaptability might be evident in global responses to major events such as health crises or environmental challenges.

Lastly, gathering narratives and sentiments from around the world through surveys or qualitative inquiries can reveal if there's a unified global narrative or shared understanding, a sign of collective consciousness.

Practical conclusions

- In light of the current confrontational geopolitical landscape and the deepening polarization of ideological views in many societies and globally, examining the hypothesis of an emerging planetary brain and the potential for planetary consciousness is both relevant and practically significant.
- 2. Considering the analogy presented in this article between the specialization of cognitive functions of the two hemispheres of the human brain and the emerging two ideological and geopolitical blocks on our planet, it is essential to promote a logical and naturally aligned approach of patiently moderating conflicts and realizing that changing this general pattern is not possible.
- 3. Elements of knowledge about the formation of the global mind should be introduced into the curricula of education of schools and universities. It should improve the processes of education and stimulation of creativity.
- 4. People who professionally examine reports of transcendent feelings, in particular psychologists, psychotherapists, and clergymen, should consider the possibility that the source of these influences may be a superhuman planetary consciousness. This would in many cases diminish anxiety.
- 5. Both sociologists, politicians and other people dealing with social issues should know and consider the discussed mechanisms of synchronizing and consolidating groups and human communities. An analogy should be used in evaluation of the state of mind of people characterized by significant coherence and the changing state of mind of



- large communities, nations and the entire civilization.
- 6. The possibility, outlined in the article, that a planet acquiring its own superhuman awareness may seek interaction and with analogical beings should be considered by those who comment on cosmological models.

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