

Consciousness and its meaning, ontologically

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Сознание и его смысл, онтологические аспекты
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Abstract. The author argues that consciousness and its meaning may only be defined and explained within an ontological system. Such a system is proposed in this article, with matter, energy, and life as its components, and with all its components defined as changes. The systematic relations between matter and energy and the semantic relations among all its components together may define and explain what and how consciousness is, why there is consciousness, where and when it may occur, and what is its significance or meaning.

Keywords: Brain, Consciousness; Emotion; Evolution; Intelligence; Language; Life; Meaning; Mind; Ontology

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Резюме. Автор утверждает, что сознание и его смысл могут быть определены и объяснены только в рамках онтологической системы. Такая система предлагается в данной статье, компонентами которой являются материя, энергия и жизнь, а все компоненты определяются как изменения. Системные отношения между материей и энергией и смысловые отношения между всеми ее компонентами в совокупности могут определить и объяснить, что и как есть сознание, почему оно существует, где и когда оно может возникать и каково его значение или смысл.

Ключевые слова: мозг, сознание, эмоция, эволюция, интеллект, язык, жизнь, смысл, разум, онтология

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Заключение

РЕФЕРАТ

-Как говорил Аристотель, все люди по своей природе стремятся к знаниям. Сознание занимает одно из первых мест в списке вещей, которые мы всегда хотим знать. Однако в этой статье автор утверждает, что сознание можно только понять, но никогда не познать, главным образом потому, что оно является неотъемлемой частью нашей способности познавать.

-Знание - это коммуникация, а понимание – это создание или активация системы, которая объясняет или интерпретирует эту коммуникацию.

-Научные системы всегда основаны на конкретных сущностях и их свойствах. И каждая сущность подразумевает определенные объяснительные ограничения.

- Автор предлагает другую систему, онтологическую систему, компонентами которой являются материя, энергия и жизнь, а все ее компоненты определяются как различные изменения. Эта система, как единство изменений, не ограничена ничем, что бы она ни объясняла, ни мозгом и нейронами, ни клетками и генами, ни белками, жирами, сахаром и нуклеиновой кислотой, ни частицами, волнами и полями, ни даже временем и пространством нашего космоса.
- Если все мозги или нервные системы, включая человеческий мозг, можно определить как разум, то эта система также может быть нашим онтологическим пониманием разума. Системные отношения между ее компонентами могут онтологически определять и объяснять, что и как есть сознание, почему оно существует, где и когда оно может возникать и каково его значение или смысл.
- Кратко и емко обсуждаются различия между таким онтологическим объяснением и многими другими теориями сознания.
- Материя и энергия - простые части этого определения и объяснения.
- Системная сложность материи может быть объяснением интеллекта. Существуют наследственные и приобретенные изменения М. Наследственный интеллект определяет наследственное поведение системы, а приобретенный интеллект – приобретенное поведение.
- Фундаментально, сознание – это различие между материей и энергией, которое проявляется, когда обе встречаются через определенное системное отношение, особенно когда материя находится в состоянии бодрствования. Такое состояние также объясняется биологически и физически.
- Жизнь, однако, является сложной частью этого определения и объяснения.
- Онтологически, если нет жизни, материя и энергия сами по себе не могут стать аксиомами какой-либо системы и не могут быть отличимы друг от друга.
- Эпистемологически никакое знание невозможно для любой системы без жизни как ее компонента. Знание и эволюция – это одно и то же. Все наши знания в корне зависят от направленности жизни, которая доминирует в нашей реальности.
- Система может быть только путем или каналом, если в ней нет жизни как компонента. И тогда не существует различия между сознанием и поведением.
- Более того, система, компонентами которой являются только материя и энергия, в корне противоречит рождению, смерти, развитию и эволюции.
- Только жизнь объясняет, почему все, включая нас и наш космос, должно быть создано, но ничто не может оставаться вечным. Без направленности жизни естественный отбор сам по себе не может ничего сделать для нашей или их эволюции.
- И наконец, жизнь – это также онтологическое объяснение агентности или намеренного действия.

- Таким образом, ключ к пониманию сознания – это не систематические отношения между материей и энергией, а семантические отношения между всеми тремя компонентами, в которых и материя, и энергия – не более и не менее чем языки, а жизнь – их уникальная причина или следствие. Причина, по которой вообще существует сознание, заключается в том, что оно может быть порождением определенных жизней.
- Иными словами, сознание – это коммуникация между жизнями, а не между "я" и его миром. Самость и ее мир – это лишь грамматика или рамки сознания. Ни "я", ни его мир никогда не могут быть причиной или следствием психической деятельности.
- Онтологически все языки равны друг другу, а жизнь – это окончательная истина и определенность любого "я" или его мира.
- Наши сознание, интеллект, эмоции, мышление, поведение и язык бессмысленны, если они не имеют ничего общего с нашей жизнью.
- Жизнь может быть для нас еще одним способом выйти за пределы "я" или мира, за пределы рождения или смерти и за пределы любого вида нигилизма.

Быть или жить – вот в чем вопрос!

SYNOPSIS

- As Aristotle said, all men by nature desire to know. Consciousness is very high on the list of things we always want to know. However, the author argues in this article that consciousness may only be understood but never known, mainly because it is an integral part of our ability to know.
- Knowing is communication, and understanding is to create or activate a system that explains or interprets the communication.
- Scientific systems are always based on specific entities and their properties. And every entity means certain explanatory limitations.
- The author proposes a different system, an ontological system with matter, energy, and life as its components, and with all its components defined as different changes. This system, as the unity of changes, is not limited by whatever it has explained, not by brains and neurons, nor by cells and genes, nor by protein, fat, sugar, and nucleic acid, nor by particles, waves, and fields, nor even by the time and space of our cosmos.
- If all the brains or nervous systems, including human brains, may be defined as the mind, this system may also be our ontological understanding of the mind. The system relations among its components may define and explain ontologically what and how consciousness is, why there is consciousness, where and when it may occur, and what its significance or meaning is.
- The differences between such an ontological explanation and many other theories of consciousness are discussed briefly and concisely.

- Matter and energy are easy parts of this definition and explanation.
- Systematic complexity of the matter may be the explanation of a mind's intelligence. There are hereditary and acquired changes of the M. Hereditary intelligence determines a system's hereditary behaviors, and acquired intelligence those acquired behaviors.
- Fundamentally, consciousness is the distinction between matter and energy, which shows up when both meet through a specific system relation, especially when the matter is in a waking state. Such a state is also explained biologically and physically.
- Life is, however, the difficult part of this definition and explanation.
- Ontologically, if without life, matter and energy by themselves cannot become axioms of any system, nor may they be distinguished from each other.
- Epistemologically, no knowledge is possible for any system without life as its component. Knowledge and evolution are one and the same thing. All our knowledge is fundamentally dependent on the directionality of the lives that dominate our reality.
- A system can only be a pathway or channel if without life as its component. And there is then no distinction between consciousness and behavior.
- Moreover, a system only with matter and energy as its components is fundamentally against birth, death, development, and evolution.
- Life alone explains why everything including us and our cosmos must be created but nothing may remain forever. Without the directionality of life, natural selection alone cannot do anything for our or their evolution.
- Finally, life is also the ontological explanation of agency or intentional action.
- The key for us to understand consciousness is then not the systematic relations between matter and energy, but the semantic relations among all the three components, in which both matter and energy are nothing more or less than languages, and lives are their unique cause or effect. The reason why at all there is consciousness is that it may be the birth of certain lives.
- In other words, consciousness is the communication between lives, not between a self and its world. A self and its world are only the grammar or framework of consciousness. Neither a self nor its world may ever be the cause or effect of mental activities.
- Ontologically, all languages are equal to each other, and life is the final truth and certainty of any self or its world.
- Our consciousness, intelligence, emotion, thinking, behavior, and language are all meaningless if they have nothing to do with our lives.
- Life might be another way for us to go beyond self or world, beyond birth or death, and beyond any kind of nihilism.

To be, or to live, that is the question!

Abbreviations used in this article / Сокращения, используемые в данной статье

O	return or circular change	O	возврат или круговое изменение.
C	one-way or irreversible change	C	одностороннее или необратимое изменение.
OC	life or the oneness of O changes and a C change	OC	жизнь или единство изменений O и изменений C
M	matter or the O change that is not the O of OC	M	материя или O изменение, которое не является O, принадлежащим OC.
E	energy or the C change that is not the C of OC	E	энергия или изменение C, которое не является C, принадлежащим OC.
EME	the system relation between energy-matter-energy	EME	системное отношение между энергией-материей-энергией.
MEM	the system relation between matter-energy-matter	MEM	системное отношение между материей-энергией-материей.

MAIN CONTENT OF THE ARTICLE

Introduction. This article is based on my effort, not to know but to understand ontologically what and how consciousness is, why there is consciousness, where and when it occurs, and what is its significance or meaning.

Since neuroscience alone may never answer all those questions.

Human brains are structurally different not only from non-human brains but also from each other. Even the same brain is not identical to itself across time. If not confused or conflated with the differences in their structural complexity, neuroscience may never prove either that consciousness is exclusive to human brains, brains in general, neurons, or organisms, or that consciousness may be explained without its general evolution and individual development.

David Chalmers' hard problem [1995] may never be solved by the advances in science and technology if consciousness is not a problem of how to know the brain, but rather a problem of how to understand the mind.

To know brains is to get the specialization of certain knowledge and to understand the mind is to give the generalization of the same knowledge.

Knowing and understanding are interdependent and equal to the same knowledge, none of which is more fundamental than the other.

The approach to an understanding is to create a specific system as the explanation of all known. Newton's laws of motion, Maxwell's equations in electromagnetism, Einstein's theory of relativity, and Schrödinger's wave function, for example, are all such systems.

Ontologically, nothing may exist if may not be a system or a part of it, no matter if it is a particle, a molecule, a plant, an animal, a human, a star, or a cosmos.

Being = system relations (Ax. 1)

It also reinterprets Parmenides' idea "to think and to be are the same thing".

If all the brains, including human brains, may be defined as the mind [Smart, 2017], its system relations must be the explanation of consciousness, as well as intelligence and emotion.

1. System components

Those particles discovered by particle physicists and the cosmos revealed by astrophysicists have not and may never be proved as the ultimate components or entirety of our reality.

Gödel's incompleteness theorems may be understood as saying that no system may ever be a complete explanation if with any entity as its component, or as its entirety. At least, no such components or entirety may ever explain a system's origin or evolution.

Furthermore, a complete explanation requires a unification of ontology and epistemology, which interprets not only the world but also the interpreter.

Therefore, I will not try to explain the mind here with entities such as particles, waves, and fields, or protein, fat, sugar, and nucleic acid, or cells and genes, let alone neurons and the brain.

I will explain the mind with an ontological system [Zhang, 2022].

An ontological system is either the past or the future through which we may understand the present.

This ontological system is with matter, energy, and life as its components, and with all its components defined as different changes.

It seems to me that matter, energy, and life are the same components of our past, present, and future, which explain not only the distinctions of our past, present, and future but also the nature of my explanation and the reason why I explain.

Ontologically, no element alone is an element. If biological entities are sorts of emergence, so are all known physical entities. As a unity of changes, this ontological system is not limited by any known element or entity, even not by mass conservation, energy conservation, information conservation, or probability conservation [Diaconis et al, 2007].

The matter may be defined as one kind of change, the energy as another kind of change, and the life as their oneness, unity, or interdependency.

Birth or death is then the beginning or end of the oneness, unity, or interdependence.

Ontologically, matter may be understood as the O changes, such as return or circular changes, and energy as the C change, such as a one-way or irreversible change. C is then the open of O changes, and O the close of a C change. Quantum fluctuation is a kind of O change, parity non-conservation in weak interaction or spontaneous symmetry breaking is then a C change.

Random change or variation may be understood as a kind of O change.

If OC means the oneness, the unity, or the interdependency of O changes and a C change, the definition of life may be formulated as:

$$\text{Life} = \text{OC} \quad (\text{Ax. 2})$$

In other words, life is both and neither of the other changes.

Etymologically, the O is derived from Parmenides' notion of "one", or Leucippus' and Democritus' "ones", the C from Heraclitus' notion of "change", and the OC from Hegel's notion of "the absolute".

If the O of OC might be defined as $A=A$, then the C is $A \neq A$. If the O of OC might mean mutual causation, then the C is always the distinction of cause and effect. Therefore, a no-boundary cosmology should be a mutual causation that explains not only the beginning but also the end of our cosmos. Otherwise, the singularity of time and space may only be an intermediate link within the C.

Though its O is not the same as matter, and its C is not the same as energy, the OC is as fundamental as both of them [Zhang, 2020]. Ontologically, matter or energy may not be defined as change or distinguished from each other, if without life as a component of this system.

Its differences from both matter and energy are that the O of OC may be understood as creation and the C of OC as transcendence. Therefore, life explains why everything including us and our cosmos must be created but nothing may remain forever. Without the C or directionality of life, natural selection alone cannot do anything for our or their evolution [Sharma et al, 2023].

OC might mean an ontology against both absolutism and relativism, against absolutism with its O, and relativism with its C. And it is one and the same answer to Immanuel Kant's four antinomies.

Physics is about a world of O changes such as string theory or multiverse theory. And the C of OC determines that the O is never an absolute truth. And therefore, OC negates the possibility that we may ever have a theory of everything.

OC alone is the ontological basis of both time and space. The O of OC is the frequency of time or the dimension of space, and the C their shared directionality. Without the directionality or the C of OC, the singularity of space and time may remain unchanged and never evolve [Hertog, 2023].

Especially, as a unity of both clocks and an arrow, OC might be a better definition or explanation of time, better than entropy or the second law of thermodynamics. And this is vital for us to understand the origin of the mind and consciousness.

Without the C of OC, there is no time, even though there may still be countless clocks ticking. Therefore, there might be no time but only different clocks in Einstein's special theory of relativity.

Both one and many, both universals and individuals, both potentiality and actuality controverted by philosophers, are nothing more or less than the directionality of OC.

If "free will" is the question, OC is then its ontological answer, in which O is freedom and C the will. In other words, C change is the determinism of OC, and O changes the indeterminism. And this is also vital for us to understand the mind and consciousness [Yurchenko, 2023].

The C of OC is not only the open of O changes but also the directionality of the open. Lives may therefore be divided into two categories according to the contrary directions of their C changes. The one with its C toward energy may be called a spring life, and the one with its C toward matter an autumn life.

Because of the C of OC, all lives are asymmetric or non-conservative changes. A spring life consumes matter and creates energy, and an autumn life does the opposite.

Therefore, matter may be understood as the birth of a spring life or the cold death of an autumn life, and energy as the birth of an autumn life or the heat death of a spring life. All the so-called non-living matters, such as protons, neutrons, or atomic nuclei, are such matter, the remains of some dead autumn lives deeply frozen by our environment.

An artificial life, no matter if it is hard, soft, or wet, is not really a life if it is neither a spring life nor an autumn life, nor if it is immortal by nature.

A plant or animal is a living system, but not all living systems are biological. The possibility that organisms may arise from inanimate matter does not exclude the possibility that all known physical entities may have been created by lives existing before them.

Autumn lives alone are the explanation of the origin and development of all biological beings, including human beings and human brains.

Without the C of autumn lives, physics may never explain evolution or natural selection completely [Wong et al (2023)], and neuroscience may never explain the mind and consciousness completely.

2. System relations

A living system is always composed of both spring and autumn lives, and dominated by autumn lives.

Since spring life and autumn life may be connected by the changes of their death and birth, the mind, as a system of different lives, is always organized by two kinds of system relations, both MEM system relation and EME system relation. Energy is the E and matter the M in a system relation.

An autumn life may occur between the first E and the M, and a spring life between the M and the second E in an EME system relation, but contrary in the MEM system relation.

In addition to life changes, there are two other changes in system relations, the form changes and the location changes, both of which may be called quale changes [Tye, 2021]. Quale changes are symmetric or conservative changes of the M or the E.

The E may undergo location changes or form changes in EME system relation, and so may the M in MEM system relation.

Nerve impulse moving along a nerve or neurotransmitter released from a synapse is only the location change, and nerve impulse converted into neurotransmitter or vice versa is only the form change.

Knowing is a quale change, understanding a life change, and thinking a process with both changes. And it seems to me that consciousness is more like a form change than a location change.

A living system, no matter how complex or simple, is always a unity of both EME and MEM system relations.

Though both are made of both system relations, the human brain or nervous system is still the main EME system relation of a human body, and the rest of the body is the main MEM system relation of the brain or nervous system. This is the ontological basis of “mind-body relation” or “embodied cognition”.

Because of the C of OC, it is alone autumn lives’ mission to create systems or system complexity. Autumn life is, therefore, the key for us to understand the origin of living systems, and to understand the development of individual or collective complexity.

Autumn life is our nature, and also the nature of our cosmos. This may explain why creating systems is almost all we have been doing.

It is also why the internal relations of a system may be the key for us to understand consciousness and its meaning.

3. The M as intelligence

The M in EME system relation may be understood as the structures of a brain, a body, or a society. All the structures may also be understood as either hereditary memories or acquired memories. And both hereditary and acquired memories may be understood as the complexity of a living system.

Knowledge is nothing more or less than the M, than both hereditary and acquired memories, or the complexity of a specific living system.

Changes in systematic complexity are not quantitative changes. Reproduction of organisms or cells, and replication of biological macromolecules, should be understood as both creation and transcendence of certain complexity, not simply as an increase in their quantity [AI-Hashimi, 2023].

It is the C of OC, especially the C of autumn lives, that determines memories to be either hereditary or acquired.

The E is the same universally, and so are both lives. All the distinctions among all the living systems are only the differences of their M. In other words, the M is the only particularity of a system, or the particularity of the E and the lives in the system.

Evolution is alone changes of the M. Therefore, knowledge and evolution are one and the same thing. And therefore, the M in EME system relation is the only one that may explain the intellectual differences among living systems.

In other words, intelligence is nothing more or less than the structures of a living system. All the structures of our cosmos are all its intelligence. So are all the structures of a human society or a human body. So are all the structures of a human brain.

Human intelligence is different but not distinct from other intelligence.

Intelligence may also be understood as the complexity of a living system against the uncertainty of its environment. All the hereditary structures are the intelligence for a living system to deal with what may occur postnatally, and all the acquired structures are the intelligence for a living system to deal with what may occur later.

Human beings are not born the same. No hereditary or acquired intelligence from different persons is ever the same. And this is a part of the human complexity for us to deal with uncertainty in the future.

Different species always arise on different complexity. Human beings are nothing more or less than the emergence of certain complexity.

Evolution is the process in which the systematic complexity of the M increases gradually and repeatedly. During the development of our cosmos, during the development of human societies, and the development of human bodies, specific intelligence always emerges when certain structures occur, and fades away when those structures disappear or are changed. This may also be the explanation for infantile amnesia or childhood amnesia.

Different physical properties are based on different complexity or are different parts of the same complexity. Nothing possesses the same properties if not in the same complexity. If mental or social properties are a kind of emergence, so are all the physical properties.

Dark matter or a black hole may also be understood as a different complexity.

All physical laws are also based on the evolution of complexity [Hertog, 2023]. At least, quantum theory and Einstein's theory of general relativity are based on different kinds of complexity. The Big Bang and cosmic inflation might be understood as the event in which the complexity of our cosmos developed from one dimension into two, three, or even more dimensions [Zhang, 2020].

Hereditary intelligence determines a system's hereditary behaviors and acquired intelligence those acquired behaviors. One loses his humanity when one loses his acquired behaviors, and his biological existence when one loses his hereditary behaviors.

Ontologically, intelligence or the M in EME system relation explains only the distinctions in the behaviors of different living systems, but never what consciousness is, or why at all there is consciousness. In other words, human intelligence or the unique complexity of human brains is not an ontological explanation of our consciousness.

No emergence may ever explain the nature of consciousness.

4. The E as consciousness, emotion, or behavior

Only lives may communicate with each other, and selves or subjects not.

The E is the only thing communicated through the EME system relation, and the M is the only thing communicated through the MEM system relation.

Within the same system relation, spring lives are the senders of the E and receivers of the M, and autumn lives are the opposite.

All the changes that occur during the communication between lives are quale changes, either or both the location change and the form change. The cosmos, as a system or systems, is full of qualia. An

electron appears as different qualia when it flows through the different structures of a conductor, or when the conductor changes from one state to another. So does it when the E passes through different biological, mental, or social structures, or their different states. In other words, qualia are the motion of the same E through different M.

Every living system, even every subsystem, has its own intelligence, and therefore its own qualia. A specific quale is always a specific system's definition of the E that goes through it.

Therefore, the qualia of our senses and feelings exist only because of the memories in our brains or bodies. And our qualia are always the action of our intelligence. Not only everything we sense but also the cognitive framework of space and time, are the characters of our intelligence.

The M in EME system relation may undergo state changes, the fluctuation in the quantity of the energy filled in memories, which may also be called quante changes or quantia. Such quantia or state changes are determined by MEM system relation. If the M in EME system relation may be understood as the strings of a musical instrument, the quante changes are the changes in their tension, and quale changes are their play.

Different emotions, including different passions, are all such quantia or their quantitative changes. It seems to me that what neurovascular coupling shows is more likely to be the result of such quante changes rather than quale changes. So might be many psychiatric disorders.

The states of the M in a living system fluctuate all the time. And there are both global and local quantia, which may turn into each other. Changes in electroencephalogram show such changes, and so does the alternation of wakefulness and sleep.

The weight as the parameter within an AI neural network might be understood as the local quantia.

The quantitative alternation of wakefulness and sleep, as the basic activity of those living systems with an intrinsic mind-body relationship, may also be found in many cells, organs, and systems in our bodies. For example, the myocardial refractory period may be understood as the period of cardiac muscle's sleep, even though it lasts only for 250ms. The period between two refractory periods may be understood as those cells' waking state and the action potential as the qualia of their communication. Both the communication and the waking state together may be understood as cardiac cells' consciousness. Though different in their complexity, there is no ontological difference between the consciousness among those cardiac cells and the consciousness among neurons in our brains.

Sleeping and waking states may also be understood as ground and excited states of atoms or molecules. Even the activities of an enzyme are also based on its quante changes.

Our physical or mental efforts to do something are all such quante changes, not quale changes.

Qualia may become quantia when the M is too low in energy, and vice versa.

All kinds of observation, such as those defined by quantum physics, are also the qualia based on the waking state of the M. The wave function might therefore not collapse if the M as the observer is not in a certain waking state.

Consciousness may be defined as those quale changes in the EME system relation based on the waking state of the M. Therefore, consciousness is always a part of the brain-body relationship or mind-body relationship.

The M in EME system relation may be understood as the center or unifying part of all the mental activities. And phenomenal consciousness always arises where and when the first E meets the M that is in a kind of waking state. Recollection or self-awareness may be understood as the second E feedbacked as the first E, and interacting with the M again.

Qualia are universal but consciousness is systematic. It is alone the M and its state that determine together if a quale change may be the system's consciousness.

Biological communication is always a duet of both the quale changes of the E and the quante changes of the M.

Behavior is the event in which the second E leaves not only the M but also the system.

Though positioned differently in EME system relation, both our consciousness and behavior are the same as duet changes. A behavior may be understood as an explicit consciousness, and a consciousness as an implicit behavior, even though the same duet may never be both explicit and implicit.

The voluntary movement of our bodies is, for example, such a duet change, with its quale change controlled by the brain through pyramidal tracts and its quante change through extrapyramidal tracts.

Attention is the duet as either consciousness in our brains or behavior of our sensory or motor organs.

5. The autumn life as cause or effect

All the duets are symmetric or conservative changes, and all the lives are dissymmetric or non-conservative changes.

An effect may become its cause if in symmetrical or conservative changes, but never in life changes.

A symmetric or conservative change may only be a language since it may not be a cause or an effect. And a dissymmetric or non-conservative change may only be the semantic meaning since it may not be communicated.

In other words, lives may only be understood but not known, and all that we may know is either the E or the M communicated as a meaningless language. We may understand the meaning of certain communication but never know it.

Ontologically, information is only what understood, but not what known.

Therefore, a language and its meaning may never be one or the same. Their ontological relation may be formulated as:

$$OC = \text{the meaning of } E \text{ or } M \text{ (Ax. 3)}$$

Lives are therefore the only cause and/or effect of all other changes in our brains, bodies, societies, and cosmos.

Our consciousness, intelligence, emotion, thinking, behavior, and language are all meaningless if they have nothing to do with our lives.

Artificial intelligence, as our external structures, intelligence, or complexity, is meaningful only if there are human lives as its cause or effect.

Ontologically, the autumn life, as both the effects of the E and the causes of the M, is our final truth and certainty, and also the final truth and certainty of all our knowledge.

The reason why at all there is consciousness is that it may be the birth of autumn lives in EME system relation. In other words, consciousness is the knowing that may cause understanding.

A Turing machine can know or behave intelligently and even consciously, but may never understand if there is no life as the cause or effect of its activities.

6. Self and world as one and the same in nature

Consciousness is always about a unique self in its unique world. However, neither the self nor the world may ever define or explain consciousness.

Though every living system, even every subsystem, expresses or hints at a unique self in a unique world, neither the self nor the world is an ontological commitment of any system.

A soul in a human body or brain is never an ontological commitment, neither is the observer of all our senses, the one that introspects our thoughts or feelings, the knower, thinker, or planner, the decision-maker or manager of our memories, or the initiator and commander of all our voluntary movements.

Ontologically, there is neither a unique world outside the mind nor a unique self inside. Even if there is a world or a self, no one may ever know or change it. And no one can do anything for the world or the self.

A self in its world is only the structure of consciousness, just as the basic grammar in a language. In other words, they are the actions of a living system's intelligence, both hereditary and acquired intelligence.

Ontologically, the self and the world are one and the same in nature, both our subjectivity and objectivity are one and the same in nature. And therefore, there is no boundary between them, and no interaction or causality between any self and any world in any consciousness.

A living system is not only different from the others but also from itself. And it never expresses the same self in the same world during its development. The contents change all the time, even though the grammar remains constant.

Every phenomenon is the truth of its system, nothing more or less. No such a world is real or unreal, no such a self is real or unreal, and neither of them is a subjective or objective truth.

Both Husserl's "intentionality" and Heidegger's "Dasein" are about such a self in its world. So is our introspection, recollection, reflection, or self-awareness.

That a cognitive subject may be the object of its cognition proves the ontological identity of every self and its world, and proves that neither the world nor the self is a system's sentience or subjective experience.

It seems to me that a unique self in its unique world might only be the way for a body to slave its mind.

7. Its differences from other theories

OC always embraces different explanations.

This explanation, based on the E, the M, and both lives organized in MEM and EME system relations, is not unique but still different from many other theories of consciousness [Van Gulick (2021), Del Pin et al (2021), Doerig et al (2021), Seth & Bayne (2022), Patrick et al (2023), Ding et al (2023)].

The fundamental difference is that this explanation is based not on entities and properties but on their changes, which means that consciousness might be more fundamental than the brain or neurons, and more fundamental than particles, waves, or fields. And it questions the possibility that consciousness may ever be defined or explained by neuroscience or quantum physics.

And ontologically, consciousness is explained here together with matter and energy as one and the same language, and with lives as its cause or effect. Life alone is my explanation of agency or intentional action [Schlosser, 2019].

The other differences are that many of them do not take life as their ontological commitment, OC as their definition of life, EME system relation as their definition of the brain or nervous system, the unity of EME and MEM system relations as their definition of the mind-body relationship, the M in EME system relation as the center or unifying part of mental activities, and autumn lives as the effects of our consciousness.

And many of them are still constrained by the subjectivity or the objectivity narrated by consciousness. Many of them do not distinguish the differences between qualia and quantia, between E language and M language, or between life changes and duet changes. Some of them are teleological explanations [Friston, 2010], and many of them even take consciousness as their explanation of agency and autonomy.

By some theories, problems arise because consciousness and behavior have not been identified as the same in nature.

It is, for example, different from the Higher-Order theory [Rosenthal, 1986] since it means that consciousness is an inner event of every living system and all its subsystems; different from the Global Workspace [Baars, 1988] since it means that it is the quante change of the M, not the quale change of the E, that determines the difference between consciousness and unconscious; different from the integrated information theory [Tononi, 2004, 2008] since it means that systematic complexity, such as different neural connections, explains only the nature of intelligence, not the nature of consciousness; and also different from Daniel Dennett's multiple drafts model [1991] since it means that the E or the M does not compete for survival.

Conclusion. It might be concluded:

- Consciousness is a part of our understanding of the mind.
- A human mind may be understood as an ontological system dominated by autumn lives.
- As a living system, the mind is the E, the M, and both lives organized in MEM and EME system relations.
- Consciousness is the quale change in which the E meets the M in EME system relation, while both emotion and wakefulness are quante changes of the M.
- Only autumn lives may be the effect of our consciousness.

To understand consciousness is the same as to understand the ontological relationship between a language and its meaning.

Such an understanding might require us to give up substantialism, rationalism, scientism, and anthropocentrism.

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