## Part XX

# QUANTUM SEMIOTICS AND QUANTUM LINGUISTICS

#### QUANTUM SEMIOTICS AND QUANTUM LINGUISTICS

#### 1. The Word as the Bridge between Heaven and Earth

When we speak, we transform Meaning into Sound.

When we write Words, we transform Meaning into Graphema, Visual letters, Sense Data (Sensoriness) – as encoding Information into Energy.

When we read, we – conversely – transform Sound, Letters, Graphema, Sense data (Sensoriness) into Meaning – as decoding Energy into Information

This is so, because the Word is the ladder built between Heaven and Earth. Or, the Word is a bridge between Heaven and Earth.

The principal idea pursued here is that Words are the bridge (or ladder) between "Heaven and Earth," where "Heaven" is the symbol of the Kingdom of Information, while "Earth" is the symbol of the Kingdom of Energy.

Meaning is in Heaven. Sensorium (Sense Data) is on Earth.

Word is the Link between Heaven and Earth.

However, Heaven is the Signified (Concept, Meaning and Information),

And Earth is the Signifier (Perception, Sense Data, Sensorium, Sound and Energy).

It is precisely the reciprocal transformation of Information into Energy and of Energy into Information that warrants the relevance of that link.

In this way, the Word - by transforming Heaven into Earth and Earth into Heaven

- transforms the Signifier (Sound, Perception, Sense Data and Energy) into the Signified (Meaning, Concept, Information). And vice versa.

Quantum Semiotics and Quantum Linguistics constitute an academic domain based on the axiom that "Every thinking of Reality changes Reality."

Every utterance of the world, or every linguistic thinking of the world, changes the world, insofar as the Word (Language) links a Possibilistic Idea-form-information with an actualistic Energy at quantum level.

The claim of Quantum Semiotics and Linguistics is that Language is active and performs predominantly at ultramicroscopic-quantum level. And that Language is actually an effective inter-ontological mechanism for linking the worlds – a "Quantum-Macroscopic inter-ontological Cross."

The particular feature of Language is that it is a Bridge linking the "quantum world of Possibilistic Idea-Form-Information-Concept" with the "Macroscopic world of Percepts."

Precisely in this sense we claim that Language and the Word constitute a bridge thrown between the quantum world and the classical macroscopic world.

The actual Word is the link between a quantum event of Unreduced Wave Function, which is Concept-Idea-Form-Information, and a macroscopic event of already Reduced Wave Function, which transforms the Word into a hybrid of the quantum and classical world.

Language does not reflect the world, it creates the world – or rather it creates the link between this world of Sensorium and Perceptions with the transcendental world of Ideas and Concepts.

Language creates the world as a combined expression of an Unreduced wave function of Concepts (Meaning) with one Reduced wave function of Percepts.

However, we have already described Percept as "Perceptory cell."

We can recall that that "Perceptory cell" is "Dissociated Quantum" in which both Information as a Subject of perception and Energy as an Object of perception are imprisoned.

2. The transformation of Meaning into Sound and Visual letters (Phonemes and Graphemes), when we write Letters and Words, represents coding of Information into Energy.

The opposite transformation of Sound, Visual Letters, Phonemes and Graphemes into Meaning – when we read – is the opposite process of decoding of the Energy into Information.

When we read, we decode the Information inscribed into the Energy of the Word. When we write, we encode through Energy the Information into Word.

When we speak and pronounce, we encode Meaning into Sound, Phoneme and Grapheme. This encoding of the Meaning into Phonemes and Graphemes occurs as transformation of Information into Energy.

When we listen and understand, we decode and re-transform Sound, Phonemes and Graphemes into Meaning. Thus, listening and understanding occur as the opposite process of re-transformation of Energy into Information.

These mutual processes of coding and decoding, of transformation of Information into Energy, and of transformation of Energy into Information, become possible owing to the transformational Code that we carry in ourselves and possess through Language. The transformational Code – in the form of transformational Matrix and transformational Patterns – has been given to us with the Quantum properties and the Quantum nature of Language.

The transformational properties and the capacity of Language would not have been possible without the Quantum properties of Language. Or the transformation nature of language stems from its Quantum nature.

This quantum nature has been described as the property of the Signs, so that the Letters and the Words would work as "Cosmological-Quantum-Gravitational Machine" transforming Energy into Information, and vice versa, through Reduction of the Wave Function and Restoration of the Wave Function, where the Signifier, by reducing the Wave Function, serves as transformer of Semantics (information) into Energy, and the Signified, by restoring the Wave Function, serves as transformer of Energy into Semantics.

#### 3. "Linguistic Imagining – Ontological Imagined Correlation"

The uniqueness in Words consists in the fact that they transform the Meaning into sensory data, that they transform Ideas into sensory images, and – conversely – re-transform the Sensory images into Ideas. However, the sensory images are a representative of Energy, and Ideas are a representative of Information.

That which transforms Language into a Universal Mediator is that Words contain and carry in themselves simultaneously Sound and Meaning, and that they transform Sound into Meaning, and vice versa. However, this transformation of Sound into Meaning is not mechanical, but mysterious, and it would have remained incomprehensible and mystic, if the explanation did not attract the logic of Dialectics, or rather the logic of "Conceptual Chords" and "Conceptual Metaphors," which is the logic of their "Mutual Conversion." The Sound has already been converted into Meaning, and Meaning has already been converted into Sound.

This mutual conversion of Sound into Meaning and of Meaning into Sound, which in poetry is designated as "Sound means" and "Meaning sounds," is the unimaginable metamorphosis, according to which the Sound has already been built not only of its own substance, but also of the substance of Meaning, and that, in turn, Meaning has been built not only of its own substance, but also of the substance of Sound, which means that Sound is converted Meaning, and Meaning is Converted Sound.

According to this logic, the ontology both of Sound and of Meaning becomes dual, where every nature carries within itself the potencies of every other nature, with which it is in a position to enter in a relation of "Conceptual Chords" and "Conceptual Metaphors."

However, insofar as there does not exist a principle that bans every nature from engaging with another nature in a relation of "Conceptual Chord" and "Conceptual Metaphors," every nature can be convertible into every other nature. And what was earlier only the unattainable ideal of the Alchemistry and "Omni-lectics," today is the proven capacity of the "Trans-mutations" of Elementary Particles, which is evidence that every chemical element can be transformed into every other element. However, if this mutual conversion of elements has been proven, then the miracle of the Language capacity also demonstrates the extrapolation of that principle of "Mutual Convertibility" at the level of "Information-Energetic" transformations. The mutual Convertibility of the Sound and Grapheme (Energy) into Meaning, and of Meaning (Information) into Sound and Grapheme (Energy) shows and proves unambiguously that Language has and works with one so far inexplicable almighty Capacity for Amalgam, "Trans-mutation" and "Trans-ontation" (similar to the alchemical transformations), which allows it to achieve with ease the scientifically impossible and unimaginable transformation of Energy into Information and of Information into Energy.

However, such a mutual transformability of Energy into Information would not have been possible if there did not exist a principle of Transformatio Pre-stabilitatis, according to which Energy ought to carry in itself in advance already properties of Information, and Information to carry in itself properties of Energy.

However, in order that Energy and Information could demonstrate such dual properties – properties that they otherwise do not demonstrate in themselves – it is necessary to secure conditions that would allow such kind of encounter between Energy and Information, and during that encounter both Monistic Natures would already start demonstrating their implicit dual nature as well. And Language is capable of securing precisely such conditions allowing their encounter.

In this way, the Linguistic Formations, amalgams, Conceptual Chords and Conceptual Metaphors no longer demonstrate merely the illusory and unreal side of Imagination and Fantasy, but it appears that Nature and the Universe are capable of responding to every Linguistic Fantasy of ours with corresponding Reality, precisely owing to that expanded and totalized Capacity for Convertibility and Transfigurability.

However, if the Universe and Nature are co-relative to the Linguistic Fantasies, then it follows that Language would not be in a position to build on its own these "Phantasms" if a preliminary "Ontological Solution-Permission" did not exist for them, a permission that is evidence that Language would not be able to construct its new forms (neologisms), if there did not exist in the Universe corresponding Ontological Analogs for them, which would also perform the "Linguistic-Ontological Correspondence" as a "Linguistic-Ontological Correlation."

According to the law on this Linguistic-ontological Correlation, to each construct of the Linguistic Imagining there corresponds an analogous or Quasi-analogous Ontological imagination. However, as every ontological imagination is some kind of Reality, it follows that for every formation of the Linguistic Imagination there exists a Corresponding Ontology or Reality.

Briefly: If the Linguistic Imagination demonstrates an Omni-semantism, then the Ontological Imagination demonstrates an "Omni-realism." Then some Ontological combination must correspond to every combination of Signs possessing Meaning.

The significative combinations of Signs entail Ontological Combinations. Another possible explanation of this "Energetic-Information Convertibility" of Language could also be sought in the capacity of Energy and Information to go deeper into the ontology, so that the Energy would reach the ontological level of "Proto-energy," which will bear in itself both properties of Energy and properties of Information, and Information in turn is capable of going to the ontological level of "Proto-information" in which it manifests both properties of Information and properties of Energy.

However, the reaching of such a "Dual ontology" should imply in turn a capacity of

Nature for such a "Significative-Ontological Correspondence," which we described earlier. It follows from this that every defense of a "Simultaneous Dualistic or Pluralistic Ontology of a Nature" should either turn for help to the Classical Dialectics and its principle of Aufhebung of Oppositions, or to appeal to a more modern principle, similar to the just described Principle of "Significative-Ontological Correspondences" or the Principle of "Congruence of the Linguistic Imagination and Ontological Imagination". This principle means that to every linguistic Imagining corresponds an Ontological Imagined.

We called this principle of Congruence of the Linguistic Fantasy with Ontological Fantasy "Linguistic Fantasizing-Ontological Fantasized Correlation or Linguistic Imagining-Ontological Imagined Correlation."

4. If Nature is capable of responding to every Linguistic combination with a corresponding ontological combination, this becomes possible precisely owing to the unique capacity of Language (the Word) to be a bridge between the "Sky of Meaning" and the "Earth of Energy" by linking one energetic Entity (Percept, Signifier) with another Informational Entity (Concept, Signified).

Let us not repeat the mistake of the millennia that interpreted Language as a means of repeating or reflecting reality: Language does not repeat reality; the Universe does not reflect itself into language, Language simply links the Energetic Universe with the Information Universe, and moreover links them in such a way that if Words did not exist, these two radically different worlds Form-Idea-General-Universal-Definite-Finite-Positive and self-identical – self-symmetrical, and of Energy-Particular-Individual-Indefinite-Infinity-Negativity-self-negation and non-self-identity, divided by Quantum Dissociation into "Formless Energy" and "non-energetic Form," it would never have been possible to have an encounter and formation of a stable Whole and a Union, which we shall refer to as "world" and "Nature."

Hence the greatness of the Word is that it links the Universe of Possibilistic Unchangeable, ever equal to itself non-energetic Memorizing Form-Idea and Information, and the Universe of ctualistic, ever-changing, ever-different from itself, ever self-other and non-self-equal Fantasizing Formless Energy.

## WORDS-SIGNS AS QUANTUM GRAVITATIONAL ONTOLOGICAL MACHINE FOR TRANSFORMING ENERGY INTO SEMANTICS AND SEMANTICS INTO ENERGY WORDS-SIGNS AS QUASI MINI SINGULARITIES

All languages have different Signifiers and the same Signified. Different Signifiers present the Macroscopic World:

Identical for all languages, Signified is Quantum Possibilistic Event.

Every Word (Sign) existing as unanalysized Unity, contains a local Gravitational Signifier and non-local Possibilistic Signified.

As Signifiers are Ontologically non-transparent, Signifieds are Ontologically

transparent.

Signifiers organize the Linear Arrow of Time and move consecutively.

Signifiers act as Chance-Fantasy Wave Functions and Chance-Fantasy forces.

Signifieds acts as Memory Wave Functions and Memory forces.

Signifieds curve the Arrow of Time perpendicularly and move Simultatively-Instantaneously.

Signifiers act as Chance-Fantasy Wave Functions and Chance-Fantasy Forces. Signifieds act as Memory Wave Functions, curve the Arrow of Time perpendicularly and move Simultatively-Instantaneously.

All Signifieds behave as Qualia. All Qualia moves simultaneously.

Every Word (Sign, Symbol) works simultaneously as Quantum-Gravitational-Ontological machine for transforming Energy into Semantics, (as transforming Actualistic Temporal Energy into Possibilistic Simultative Atemporal Meaning), and transforming Semantics into Energy (as transforming Possibilistic Simultative Atemporal Meaning into Actualistic Temporal Energy).

This Quantum Gravity that physicists seek as a theory already exists at the level of Signs and Words as "Hyle-noetic Machine" for transforming Gravitational Hyle into Quantum Noesis (Matter into Mind, Energy into Idea {Qualia}, Horme into Mneme). Here Horme-Energy-Hyle is backed by Asymmetric-Consecutive Time-Chance-Fantasy, and Mnemeform-Eidos-Noema is backed by Symmetric-Space-Simultative Time-Geometry-Memory.

Every Sign-Word machine has two doorways: Input presents Possibilistic-Quantum-Signified and Output presents the Actualistic-Gravitational-Signifier.

The Signified-Input of the Word attracts Energy from everywhere and transforms this Energy into Semantics.

The Signifier-output of the Word, transforming Semantics back into Energy, emanates Energy into the Universe.

The Sign and Word present a stage for the acting and meeting between Quant and Gravity. Through one of its Signifier-output the Word realizes Consecutive temporal flow of Energy.

Through the other Signified-input the Word realizes the Simultative flow of Possibilistic Quantum Mass.

Through its Signifier Output, the Word, transforms Semantics (Information) into Energy, makes reduction of Wave Function and produces Perception Function, which builds the visible Universe.

Through its Signified Input, the Word, transforms Energy into Semantics, makes restoration of the Wave Function, and restores the quantity of Ideal-Possibilistic Qualia.

## Reacting to Signifier and Signified Corpus Callosum's Tubulin

From this, it follows the very axons and eventually, microtubules of Corpus Callosum should work simultaneously-dualistically as dual substance, producing two conformational states of protein: Possibilistic Quantum Protein - (corresponding to the Possibilistic Meaning-Qualia of Signified, backed by Unreduced Wave Function an Non-locality) and another, Actualistic Gravitational Protein – (corresponding to Gravitational Energetic Sensorial Signifier of the unity of Signs-Words, backed by Reduced Wave Function and Locality).

Hence, to the Meaning of the Word the Corpus Callosum reacts by producing the

heterogenic hybrid of the two proteins, the Possibilistic one existing in the conformational state of non-locality; the Gravitational one existing in the conformational state of Locality.

But Possibilistic Protein, being Unreduced Quantum Waves, has the Ontology of Possibilistic Space. As Actualistic Gravitational Protein, being Reduced Quantum Waves, has the Ontology of Time. The reacting to the Meaning Protein-Binom exists as double Ontos, one state of which making a reduction of Wave Function transforms Semantics into Energy; the other of which, making restoration of Wave Function transforms Energy into Semantics.

These two conformational states of Signifiers-reacting Tubulins and Signified-reacting Tubulins work as two doorways of Word-reacting substances: Input and Output.

The Black Hole and Singularities don't decompose the substance to the pair of particles; one remains in the Black Hole, while the other leaves, but Singularity decomposes the very particle into Energy plus Form, to Essence-Qualia plus Existence (to Noema-Qualia plus Ontos, to Mneme plus Horme) and dissociates Geometry from Mass.

Hawking's radiation takes a course in such a way that the ideal form of particles as Qualia remain inside the Hole, but energetic moment of the particle radiates out.

Within Singularity every particle decomposes into Formless Energy and Non-energetic Form – Qualia.

Through their Local Consecutive Temporal Actualistic Signifiers Words associate Form plus Energy and cause reduction of Wave Function, transforming Wave Function into Perception Function, constituting the visible Universe.

Through their non-local Simultative Temporal Possibilistic Signified, the Words dissociate Form from Energy and Mass from Geometry and causing Space-Time dissociation, make restoration of Wave Function.

## WORDS AS QUANTUM GRAVITATIONAL MACHINE

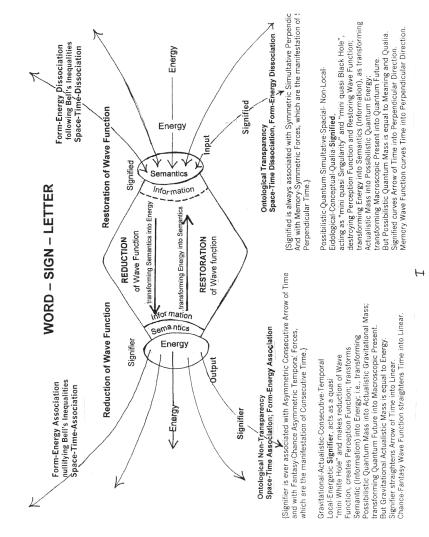
Information and Energy, which otherwise do not interact between themselves on the macroscopic universe, interact on the level of the Planck Scale.

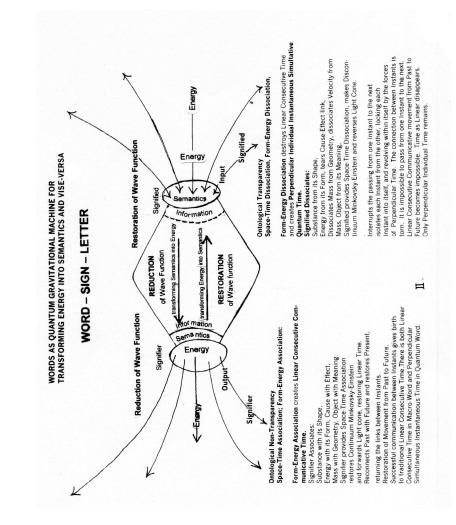
This interaction takes a course as the exchange of substance between the Nominated Subjective-Platonic Ideas (Ideal Meanings) of Words and Anonymous Objective-Platonic Ideas of the Dissociated Quantum.

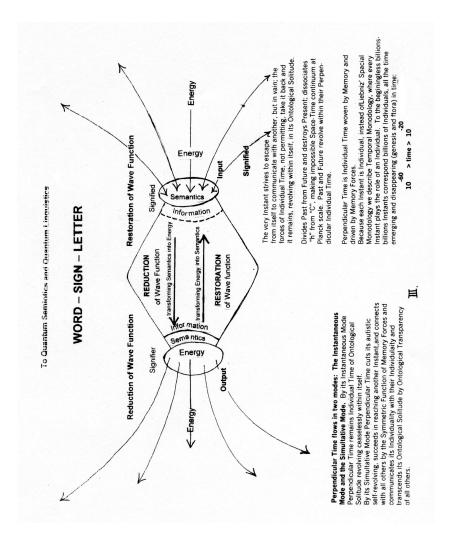
Namely because on the quantum level Energy dissociates from its Form and builds the complex of ("Non-Energetic Form-Idea + plus Formless Energy"); where non-Energetic Form becomes equal to Plato's Idea – the interaction between Information (Ideas, Concepts, Meaning, Knowledge) with already Dissociated Quantum Energy becomes possible.

From this, it follows that in its dissociated form every Quantum Energy – Wave Function – contains the compositum (composition) of ("Formless Energy + plus Non-Energetic Form-Idea").

In essence, this interaction takes the course as an exchange of two kinds of Ideal Meanings: "Ideal Meaning" of the Word bringing by Words, and "Ideal Meaning" of dissociated Quantum Energy Compositum, existing within it as Non-Energetic Form.







(Signifier + Signified-Idea) x (Non-Energetic Form-Idea + Formless Energy) - where "x" means Interact.

This interaction takes the course of a chemical reaction, where Unanalyzed Unity "Sign-Word" is emanated-radiated "Signified-Idea" and accepts, in its place, "Non-Energetic Form" from Dissociated Quantum Energy Compositum. As a result of this, the Signifier connects with another, new Ideal Meaning – that which is brought by the Dissociated Quantum Energy Compositum, and from its side, the "Dissociated Quantum Energy Compositum" accepts the Platonic Idea from Words and replaces the Platonic Idea wit

#### Non-Energetic Form

(Signifier + Non-Energetic Form) x (Signified-Idea + Formless Energy)

(Objective Anonimous Platonic Idea Subjective nominated) x (Subjective nominated Platonic Idea)

The Words (Signs), being complex unity – of "Signifiers" and "Signified" bring, by their Signifieds, Information and Non-Material Ideal Meaning, the equivalent of Platonic Ideas.

From its side, the dissociated Quantum Wave of ("Formless Energy" plus "Non-Energetic Form") brings through its "Non-Energetic Forms" Objective Ideal Meanings of the Universe, which, however, are anonymous. So, when in the arena of the human psyche and brain meet Quantum Waves and World-Signs actually takes a course of meeting between the Subjective Nominated Platonic Ideas (Signifieds) of Words-Signs and Objective Anonymous platonic Ideas of Dissociated Quant, belonging to the structure of the universe.

### WORDS (MIND-BRAIN) QUANTUM INTERACTION

There are two versions – two hypothesis – for interaction of Words (Mind-Brain) with the Quantum Realm:

1 To consider Words as quasi-mini Singularities.

2 To give up the above hypothesis and insist mainly upon the double role of Words (at their interaction with the Mind): To make reduction of the Wave Function by their Signifiers, and to make restoration of the Wave Function by their Signifieds – respectively, to transform Semantics (Information) into Energy through their Signifiers, and to transform Energy into Semantics (Information) through their Signifieds.

Perhaps, we don't need a hypothesis for Words as "mini-Singularities" in order to maintain their role as Quantum machine for transforming Energy into Semantics; probably, it is enough to save their role as Energy-Semantics Transformers to consider Words as a Quantum Gravitational Machine for making reduction and restoration of the Wave Function.

If we don't accept this hypothesis – the hypothesis for Form-Energy Dissociation – we have no other way to explain how Words (Mind) interact with Quant.

In either case, Words provide the fundamental Ontological Form-Energy Dissociation, following Bell's Theorem, and we are sure our intellects can get by without the hypothesis of

Words as "Quasi-mini Singularities", but our imaginations call to us that it needs of them.

Words simultaneously make reduction of the Wave Function and restoration of the Wave Function.

Words simultaneously – by their Signifiers – destroy Wave Function and built Perception Function, and in this way, build the macroscopic universe, and by their Signifieds destroy Perception Function and restore Wave Function and restore the Quantum World.

Words simultaneously straighten Time into linear (by their Signifiers) and curve the Arrow of Time into Perpendicular (by their Signifieds).

Words simultaneously expand and shrink the universe.

Words simultaneously transform Gravitational Time into Quantum Space. They simultaneously transform Energy into Information and Information into Energy.

Words both forward the Arrow of Time and reverse the Arrow of Time.

Words move both consecutively and simultaneously. By their consecutive movement, Words expand the universe; by their simultative movement they simultaneously expand and shrink the universe. Within Words Weil's Curvature simultaneously tends toward "0" and tends toward "infinity".

In Words Quant and Gravity meet.

In Words meet the Space of Meaning and the Energy of Time. But the "Space of Meaning" is Quantum, and the "Energy of Time" is Gravity.

Space, being only Geometry, and Geometry, being only Form and Ideal, is Simultative and Quantum, as the Energy of Time, is both Consecutive and Gravitational.

Hence: Words have to coincide: Simultative Information and Consecutive Energy. In Words meet Simultative Information and Consecutive Energy.

But we have rights to substitute Simultative Information with Simultative Quantum Energy.

We have to substitute Simultative Information with Simultative Possibilistic Energy. Hence, to relate one Energy that is Simultative and Possibilistic to another Energy that is Consecutive and Actualistic.

Therefore, instead of finding out how Simultative Information is transformed into Consecutive Energy, we can find out how Simultative Possibilistic Energy is transformed into Consecutive Actualistic Energy – and, in this way, transfers the problem from heterogeneity of Information and Energy into the homogeneity of one kind of Energy – Possibilistic Simultative – to another kind of Energy – Actualistic Consecutive.

Namely, this occurs at the process of Ontological Form-Energy Dissocation, which constitutes the Quantum Realm. As Possibilitic-Simultative Energy (equal to Possibilistic-Simultative Information) is backed by Objective Memory, behaving as Symmetric Memory Forces, as well is Actualistic-Consecutive Energy backed by Objective Chance-Fantasy, behaving as Asymmetric Chance-Fantasy Forces.

If Asymmetric Chance-Fantasy Forces (as a private case of World Asymmetric Impulse) embody the Consecutive Fantasyzing Chanceful non-selfidentical Temporal Energy – where Energy Fantasizes and Fantasy temporalizes – then Symmetric memory Forces (as a private case of World Symmetric Impulse) embody the Simultative Repetive self-identical eternalspatial Energy.

(We have to remember that both Memory Forces and Gravity Forces are two faces of

one and the same Symmetric Forces: World Symmetric Impulse; which behaves as World Simultative Eternal Drive toward Memory, Ontological Transparency, Similarity, Repetitiveness, Universality, General, self-freindship, self "I"-ness, self-positivity and self-identity.

And, that both Chance-Fantasy Forces and Anti-Gravity Forces are two faces of one and the same Asymmetric Forces: World Asymmetric Impulse, which behaves as a World Temporal Drive toward Oblivion, Ontological non-transparency, non-similarity, Nonrepetitiveness, Uniqueness, Particularity, Individuaity, self-strangeness, self-otherness, self-negativity and non-self-identity.)

Quantum Semiotics teaches us that the Objective Unconscious of the Universe exists, and that it is the Energetic Unconscious of the Universe (re-energizing unconscious), as different than Consciousness, which is Nonenergetic, because it presupposes and is born by the parting of Will and Notion – to Objective Unconsciousness, where Will and Notion are undividable and inseparable.

On the same foundation exist Energetic Signs and Energetic Eidoses.

Psyche = Dunamis + Energeia where "Dunamis" means

"Possibilitas and Potentia", and "Energeia" means "Actualitas".

Psyche = Possibility + Actuality where the Greek-European tradition translates and understands by Exigesis and Hermeneutics "Possibility" with "Eidos-Idea", and understands – by Hermeneutics - "Actuality" again with "Energy".

After the millennia of Exigesis and Hermeneutics the definition of "psyche" appears as: Psyche = Eidos + Energy.