



Homologies with the Unicist Logical Approach

This is a synthesis on the homology between the unicist ontological structure, the atomic structure, biology and electricity developed by Peter Belohlavek ().*

Here we present three homologies that allow discovering the unicist logical approach as self-evident in other fields. These homologies deal with the field of physics and biology. They are:

- 1) Homology between atoms and the unicist ontological structure
- 2) Homology between the Unicist Ontology and the structure of Biological Entities
- 3) Homology between thinking processes and the functionality of electricity

The objective of this synthesis is to provide the framework of the consistency between the unicist ontological approach and hard sciences to demonstrate not only that they are compatible but also their homology.

Two entities are homologous when they are regulated by an essentially analogous concept. Homologies allow defining conceptual benchmarks that define the limits of applicability of a specific knowledge.

Multiple homologies were developed as part of the destructive tests during the application of the unicist logical approach to confirm the limits of the solutions.

The Unicist Ontology

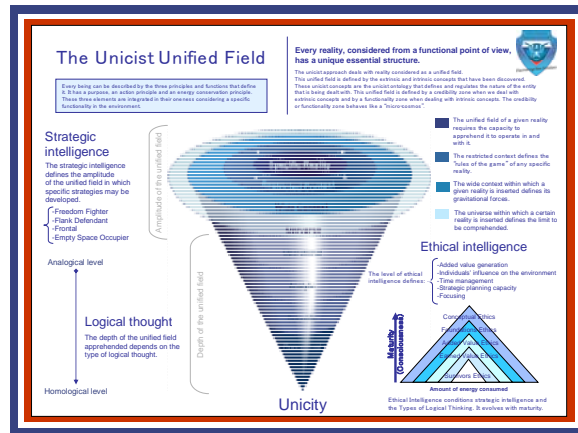
The unicist ontology describes the nature of reality with the structure and rules of the ontogenetic intelligence of nature. It describes the nature as a unified field.

Thus it has a logical structure that allows guiding the individual in the search of the nature of something and providing the necessary language to describe it.

The ontogenetic maps describe the unicist ontological structures of the functions of some reality. These maps define the essential drivers, catalysts and inhibitors which define the natural actions of these functions.

The Unified Field

Whenever we describe an evolution theory we refer to universal laws that are applicable to actual fields. In order to apprehend actual fields man bears his own perception capacity restrictions. That is why different people are able to apprehend different realities.



http://www.unicist.org/unicist_unified_field_en.pdf

From an objective point of view, there is only one reality. We define this reality as a unified field restricted by an arbitrary decision, though functional to man.

The amplitude of the unified field depends on the capacity to adapt to environment. The adaptation capacity belongs to the individual participating.

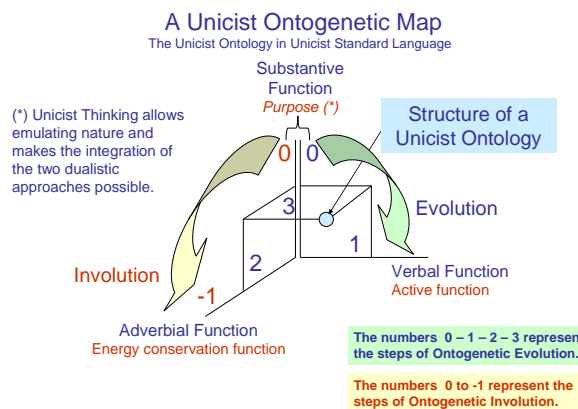
When the individual merely seeks to flow through environment and subordinates to it, adaptation is not possible. The same holds true when he intends to dominate it.

Fallacies are mechanisms that avoid apprehension of a unified field in all of its depth.

When one is overwhelmed by a given reality there are two possible paths: accept it, hence seeking to apprehend it or not, or “solve” the conflict through fallacies.

Introduction

After the unicist ontology has been apprehended, it becomes evident that its structure is homologous to the structure of atoms and biology.



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This homology allows dealing with the nature of the complex aspects of all sciences using the same unicist ontological structure defined by the ontogenetic maps to define the concept of what is needed to develop with a fully reliable approach.

Life sciences, engineering, electronics, information technology, behavioral sciences, anthropology and architecture among other application fields need to use the unicist ontological structure and the corresponding ontogenetic maps in order to be apprehended in their nature.

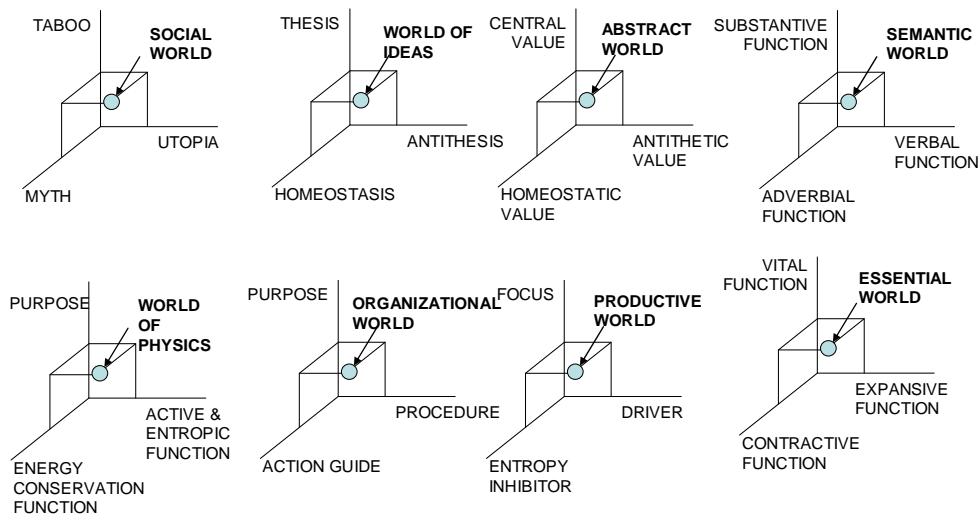
Without them concepts are just ideas and not concrete structures to be followed.

Application of the Unicist Ontological Structures in Different Fields

We have chosen to use functional names for the different ontological approaches to reality.

The integration of these names is functional to the approach to a specific reality.

Unicist double dialectics semantics



Homology with the Atomic Structure

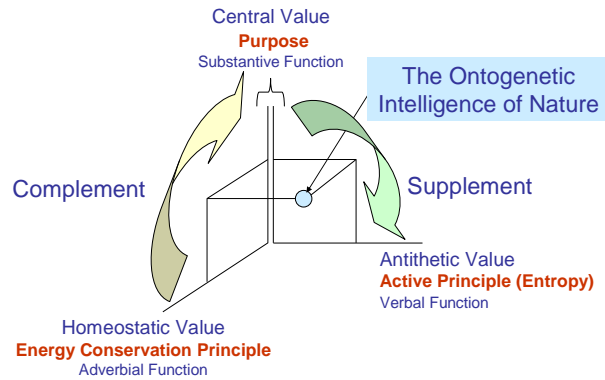
The ontogenetic intelligence of nature defines that every living being has a purpose, an active principle and an energy conservation principle.

Learn more at: <http://www.unicist.org/unicist-theory-evolution.pdf>



The Ontogenetic Intelligence of Nature

The Implicit Axiom of the Unicist Ontology of Evolution

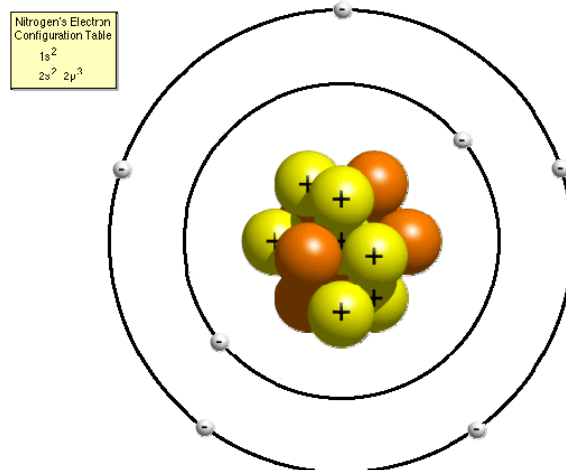


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The purpose can also be defined as the substantive function, the active principle as the verbal function and the energy conservation principle as the adverbial function.

In physics atoms are defined by having a central nucleus, composed by positively charged protons and neutral neutrons, surrounded by negatively charged electrons.

Atomic Structure



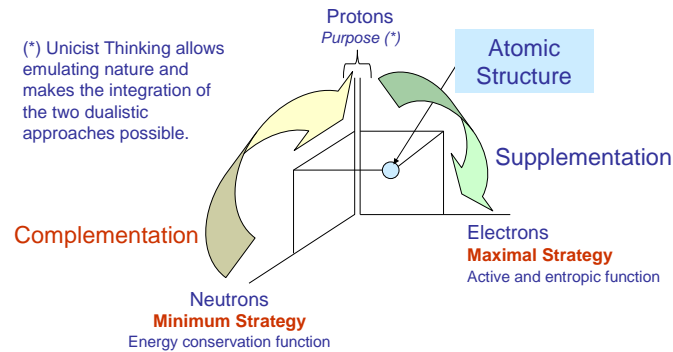
The positively charged protons are homologous to the substantive function, the neutral neutrons are homologous to the adverbial function and the negatively charged electrons are homologous to the verbal function.

An atom, having an equal number of protons and electrons, is electrically neutral.



Unicist Ontogenetic Map of the Atomic Structure

The Unicist Ontology in Unicist Standard Language



Living beings are continuously evolving and involving which implies that there is always disequilibrium between their purposes and their active functions which is homologous to the disequilibrium of protons and electrons.

This disequilibrium is what defines the energy and the influence of an ontogenetic structure in the environment.

The active function and the purpose are antithetic and supplementary implying that both are charged with energy.

The energy conservation function and the purpose have a complementary relationship which is evident in atoms where the neutrons allow the integration of the protons.

The mass of an element is basically given by the nucleus of an ontological structure meaning that the mass is given by the purpose and its complementary energy conservation function. But the evolution of a living being is given by the power of the active function in the environment.

Homology with Biological Entities

The unicist ontology of a “biological entity” defines its structure and functionality in an environment.

The genotype defines the genetic structure of the entity that rules its evolution and generates the phenotype of the being. The objective of the genotype is to ensure the permanence of species, its reproduction and production.

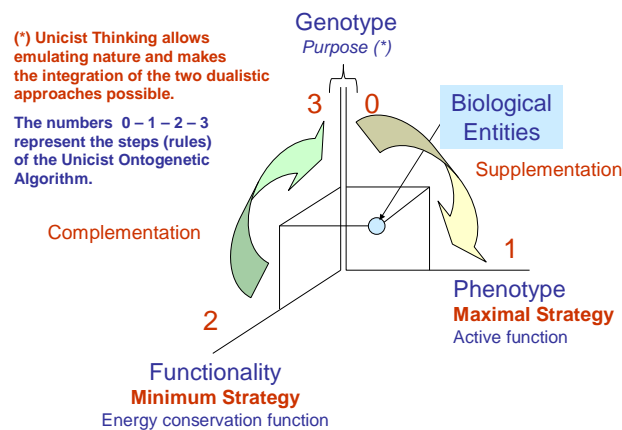
The phenotype defines the morphologic, behavioral and materialistic characteristics of the entity.



It defines the functional characteristics, the functional power of the entity and the functional assurance.

Functionality defines the effectiveness of the phenotype measured as the consequence of the adaptation of the biological entity to the environment.

Unicist Ontology of Biological Entities in Unicist Standard Language



Functionality is measured in the capacity of adapting and growing on the one hand, and surviving, on the other hand.

The understanding of the ontology of “biological entities” helps to follow the laws of nature when dealing with genetic engineering processes and use it to apprehend the nature of beings with “artificial life” such as institutions.

Double Dialectical Thinking to deal with Triadic Structures

To approach a reality integrated by three elements with a dualistic mind it is necessary to consider it as a dualistic integration of binary elements.

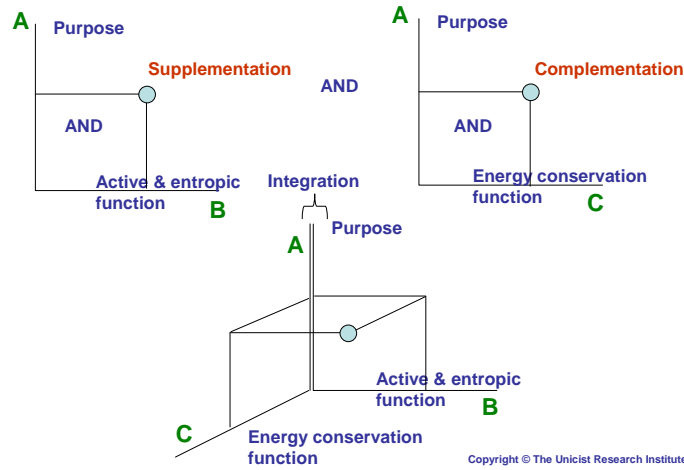
To perceive dialectics it is necessary to have a high abstraction capacity.

Those who do not have the abstraction capacity consider the dialectical behavior based on observable facts of reality. They cannot differentiate essential correlations from cause-effect relations.

The Unicist Dialectics allows dealing with human adaptive systems managing the integration of their double dialectical behavior.

With this double dialectical approach (purpose - active function, purpose - energy conservation function) one can understand the structure of an adaptive system and its evolution.

Unicist Double Dialectical Thinking



Unicist Dialectics is based on the emulation of adaptive systems, emulating the ontogenetic intelligence of nature (purpose, active principle, energy conservation principle).

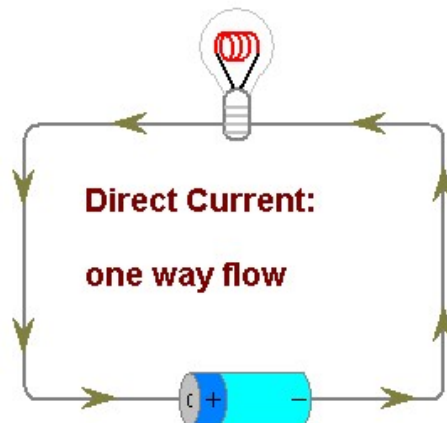
Its application to human adaptive systems made the emulation of individual, institutional and social evolution possible.

Individuals who have the necessary functional intelligence and the will to add value to an environment, and are able to see the double dialectics, develop two different actions to ensure results: on the one hand, they impulse action and on the other hand, they develop actions to inhibit entropy.

Homology between Thinking Processes and the Functionality of Electricity

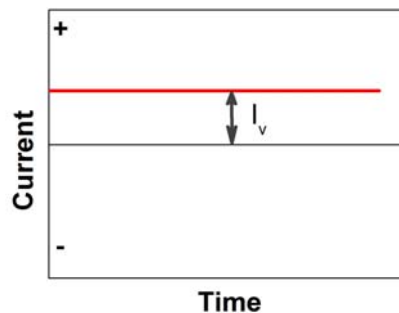
Direct Current

An electric current that flows continuously in a single direction is called a direct current, or DC.





DC (direct current) is the unidirectional flow or movement of electric charge carriers. The intensity of the current can vary with time, but the general direction of movement stays the same at all times.



The positive end of the battery is always positive relative to the negative end, and the negative end of the battery is always negative relative to the positive end. This constancy is what pushes the electrons in a single direction.

To transform the voltage of direct current it is necessary to change its nature.

Dualistic Thinking (Logic)

Dualistic thinking is functionally homologous to direct current and is ruled by analogous principles.

Dualistic thinking is based on moving in a single direction to avoid the influences of the environment. It requires using the disjunction “or” to avoid changing the direction of the action.

Dualistic thinking cannot be modified during the process if a change to improve the production of results was necessary.

Dualistic thinking is functional to follow operational methods. Without the use of dualistic thinking operational behavior cannot exist.

Dualistic thinking cannot be transformed into double dialectical thinking. To transform dualistic thinking into double dialectical thinking it is necessary to change the environment.

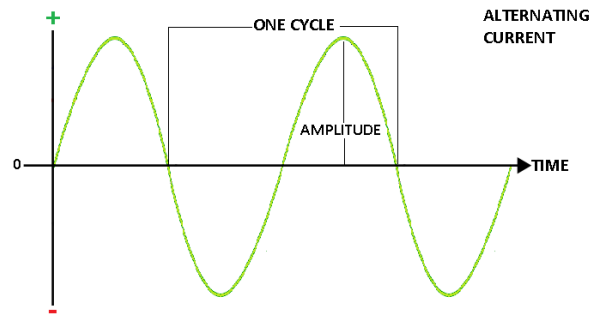
Unicist reflection, the process of action-reflection-action, is the context needed to transform a dualistic approach into an integrative, double dialectical, approach.

Alternating Current

In electricity, alternating current (AC) occurs when charge carriers in a conductor or semiconductor periodically reverse their direction of movement.



An AC waveform can be sinusoidal, square, or sawtooth-shaped. Some AC waveforms are irregular or complicated. An example of sine-wave AC is common household utility current (in the ideal case).



Square or sawtooth waves are produced by certain types of electronic oscillators, and by a low-end uninterruptible power supply (UPS) when it is operating from its battery. Irregular AC waves are produced by audio amplifiers that deal with analog voice signals and/or music.

The electrons in an AC circuit don't really move along with the current flow. Instead, they sort of sit and wiggle back and forth. They move one direction for $1/60^{\text{th}}$ (for example) of a second, and then turn around and go the other direction for $1/60^{\text{th}}$ of a second. The net effect is that they don't really go anywhere.

Alternating current can easily be transformed towards higher or lower levels of voltage and rectified in order to be changed into direct current.

Double Dialectical Thinking (Logic)

The double dialectical thinking is homologous to the functionality of the alternating current and works in an analogous way.

It is based on the integration of two dualistic pairs, purpose-active function and purpose-energy conservation function, which move back and forth following the cycles defined by the synchronicity with the context.

These cycles have to be unperceivable by the context in order to work. This is achieved when the cycles are fully synchronic with the environment.

In the field of human adaptive systems the alternation is between expansion and contraction and freedom and security (see anthropological invariables).

The double dialectical thinking can easily be transformed into dualistic thinking in order to sustain operational actions.



Conclusion

This homology is just a demonstration that beginning with physics, continuing with biology and ending with human behavior the essential structures of these fields are necessarily compatible and homologous.

This implies that any modeling, emulation or simulation of an entity has to be based on this triadic structure integrated by the complementation and supplementation laws. The functionality of the DNA is an evidence of this structure.

Dualistic approaches are essentially fallacious because they are necessarily based on a *ceteris paribus* condition which can only be used in stagnated environments. The more adaptive a “system” is, the more paradoxical the results of using dualistic approaches are.

(*) Peter Belohlavek: <http://www.unicist.org/pb.shtml>

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