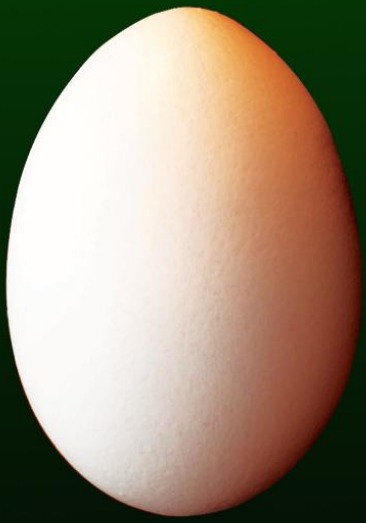
Scientific Dissemination

The Unicist Paradigm Shift in Sciences

An Introduction to the Unicist Theory, its Scientific Evidences and Applications



The Unicist Research Institute
Pioneers in Complexity Science Research since 1976

The Unicist Theory explains the dynamics and evolution
of living beings and complex adaptive entities.

The Unicist Paradigm Shift in Sciences

An Introduction to the Unicist Theory, its Scientific Evidences and Applications

The Unicist Research Institute

The Unicist Paradigm Shift:
The Path towards Double Dialectical Actions

The objective of the research works developed at The Unicist Research Institute has been the development of solutions to influence complex environments in order to foster their evolution. This research drove to a paradigm shift in science, which is based on emulating the maximal and minimum strategies that are implicit in the intelligence that underlies nature.

This allowed discovering the double dialectical behavior of nature and transferring this knowledge to its application to deal with adaptive environments in order to ensure the results that are being fostered.

The core application of the paradigm shift in sciences was the development of maximal strategies to grow and minimum strategies to ensure survival using double dialectical actions to manage functions in complex environments in order to ensure results.

In this book you will be able to access a synthesis of the Unicist Paradigm Shift in Science in order to become aware of what was made possible.

Contents

Part I
The Paradigm Shift of the Unicist Theory (Before and After the Unicist Theory)

The Unicist Paradigm Shift in Sciences

The paradigm shift of the Unicist Theory is based on the discovery of the ontogenetic intelligence of nature, which is the intelligence that underlies nature. It establishes the basic structures of behavior in nature. The understanding of the unicist paradigm shift is necessary to accept the validity of the resulting applied technologies.

Giving Birth to Complexity Sciences

The final goal of the Scientific Research developed by Peter Belohlavek at The Unicist Research Institute was find a structural solution for complexity as a universal problem.

The Unicist Theory gave birth to Complexity Sciences, providing both their epistemological structure and their integration with Systemic Sciences. This allowed developing a scientific approach to adaptive environments.

At an operational level the objective was to deal with complex adaptive systems. These systems might be natural systems or artificial complex adaptive systems like cultures, institutions or information systems.

This drove to the development of the Unicist Theory and the shift it generated in sciences. This approach allowed integrating systemic sciences with complexity sciences.

Dealing with Living Beings and Complex Adaptive Entities

The Unicist Theory explains the dynamics and evolution of living beings and complex adaptive entities. It substituted empiricism by a pragmatic, structuralist and functionalist approach and replaced knowledge falsification processes with destructive testing processes.

The four pillars of the paradigm shift developed by Peter Belohlavek are:

1. **The unicist theory**, which explains the dynamics and evolution of living beings and complex adaptive entities.

2. **The unicist theory of evolution**, which allows developing future research.
3. **The epistemological structure of complexity sciences**, which allows managing the complex aspects of reality.
4. **The unicist theory of the unified field in nature**, which allows managing the unified field of complex adaptive systems.

The paradigm shift of the Unicist Theory allowed the emulation of nature in the field of complex adaptive systems and allowed integrating the "know why" with the "know how".

This theory is based on the discovery of the intelligence that underlies nature. It permits, besides apprehending the knowledge of how things occur, managing the "know why" of the occurrence of events.

In the social field and in the business field, this emulation of nature is materialized in conceptual management, the organization driven by the use of objects and the organization by roles.

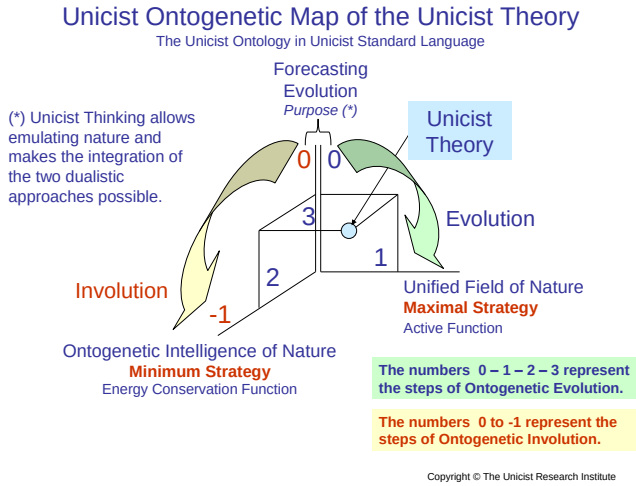
The Unicist Theory

The Unicist Theory explains the evolution and dynamics of complex adaptive entities whether they are natural beings or artificial entities. This theory is based on the discovery of the triadic structure of the ontogenetic intelligence of nature.

The purpose of this theory is to provide a framework to forecast the evolution of adaptive entities considering their restricted and wide contexts.

This theory describes the universal structure of the unified field in nature that is applicable to all complex adaptive entities whatever their kind. It needs to be considered that the unified field has a triadic structure that is homologous to the structure of the ontogenetic intelligence of nature.

The evolution of complex adaptive entities is based on the laws of the ontogenetic intelligence of nature.



This intelligence includes an active principle that drives the evolution and establishes the maximal strategy of the entity while it generates entropic effects. It also includes an energy conservation principle that establishes a minimum strategy to ensure the survival.

This theory allows emulating the organization of nature when dealing with adaptive environments.

It is based on forecasting their future scenarios, defining the functional unified fields based on the knowledge of the ontogenetic map that defines their conceptual structure. This approach simplifies the management of complex environments.

The Emulation of Nature: A Paradigm Shift in Sciences

The unicist approach to complexity emulates nature to deal with natural or artificial complex adaptive systems.

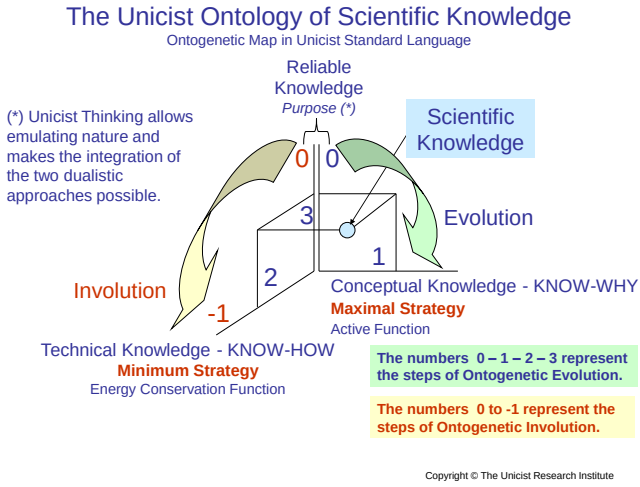
Such emulation is based on the discovery of the ontogenetic intelligence of nature that regulates the evolution of living beings and natural entities.

This ontogenetic intelligence underlies the actions of human beings, which are driven by the concepts individuals have.

The concepts that guide human actions, which are homologous to the ontogenetic intelligence of nature, allow understanding the evolution of things and adapting in an environment.

The emulation of nature requires having an adaptive behavior in the environment. Adapting requires: 1) exerting influence in the environment; 2) managing the influence of the environment. It requires using the conjunction "and" without using the disjunction "or".

The Paradigm Shift in Sciences



The unicist paradigm shift is based on the integration of the "KNOW-HOW" that underlies the empirical sciences with the "KNOW-WHY" introduced by the Unicist Theory.

It defines that to access reliable knowledge it is necessary to know the concepts that underlie facts, which confirm the "KNOW-WHY", and the justifications that confirm the "KNOW-HOW" of those facts.

The paradigm shift in sciences made the complex adaptive systems become reasonable, understandable and predictable. This paradigm shift allowed defining what is possible to be achieved and not only approaching reality with a probabilistic approach.

The shift in sciences is a pragmatic, structural and functionalist approach that subordinates the preexisting empirical approaches. It integrates the observable facts with the "nature of things".

Expanding the Boundaries of Sciences

As it is known, the management of complexity has been an unsolved challenge for sciences.

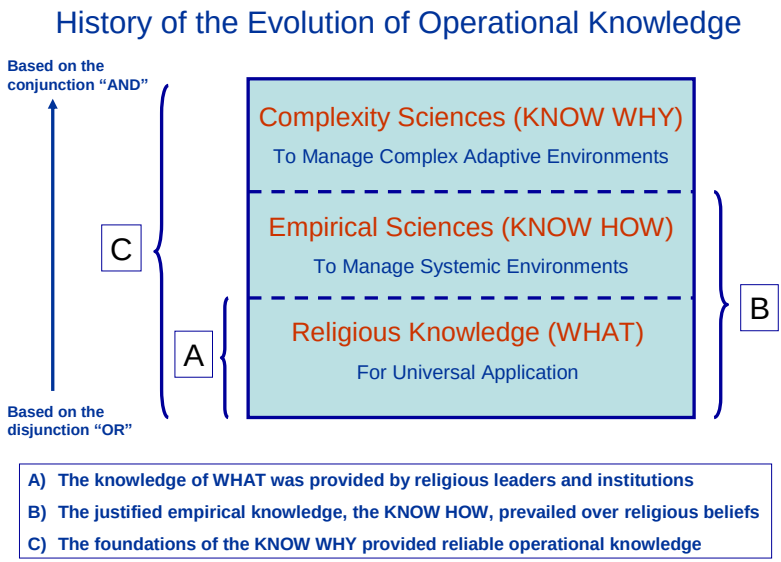
This challenge was faced in 1976 by The Unicist Research Institute that was a pioneering organization in finding a solution for complexity without using artificial palliatives.

The paradigm shift, based on the emulation of nature, was developed to solve the need of having reliable knowledge to deal with complex adaptive systems. It was provoked by the fallacy of considering empirically-justified knowledge as reliable knowledge.

It allowed managing complex environments as a unified field.

The paradigm shift was triggered by the need to understand complex adaptive systems.

The shift implies having changed the empirical approach to sciences replacing it by a pragmatic, structuralist and functionalist approach to deal with complex environments that integrates, at an operational level, the preexisting empiricism.



This is a superior level in sciences that integrates complexity sciences with systemic sciences using the double-dialectical logic to emulate the ontogenetic intelligence of nature and using objects to emulate the organization of nature.

The paradigm shift was developed at The Unicist Research Institute where more than 5,000 unicist ontological researches have been developed since 1976 in the field of individual, institutional and social evolution.

It became a paradigm shift in 2015, when the Unicist Epistemology was published, after having been used, in its final version, for more than 15 years.

The History of the Shift in Sciences:

A) The first stage of collective knowledge was covered by religions, that provided the "WHAT" was acceptable as necessary knowledge.

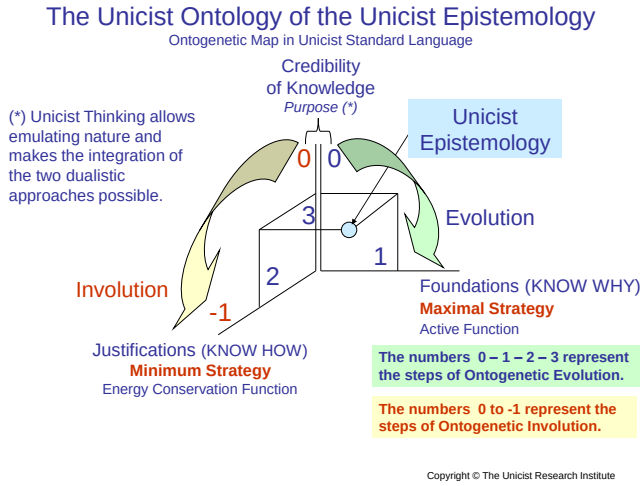
In the times when the knowledge was based on religious beliefs, the emulation of nature was a heresy.

B) The second stage was provided by the development of empirical sciences that provided the "KNOW HOW" to deal with the environment. In the era of empirical sciences, the emulation of nature was a utopia.

C) The last stage was the inclusion of the "KNOW WHY", which required the comprehension of the nature of things and was provided by the unicist approach to complexity sciences.

The emulation of nature became possible in the era where complexity became manageable by emulating the logic that underlies nature. This is the unicist paradigm shift in sciences.

The Unicist Epistemology sustains the Shift in Sciences



The unicist approach to Epistemology is based on the development of logical foundations and empirical justifications to sustain human knowledge.

This epistemology is a pragmatic, structural and functionalist approach that allows building reliable knowledge that replaced the processes of the falsification of knowledge by destructive testing processes.

It is based on the Unicist Theory which is a paradigm shift of the scientific approach to complex adaptive systems.

This theory provides an approach to complexity based on the use of the unicist logic that emulates the intelligence that underlies nature. It integrated complexity sciences with systemic sciences in a unified field.

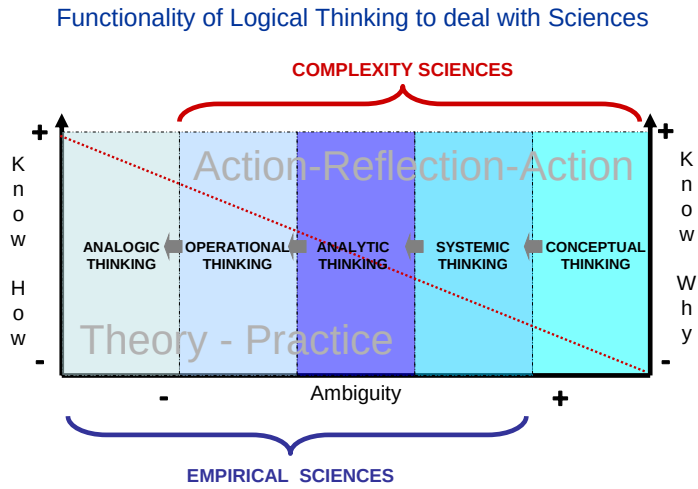
The paradigm shift is based on the integration of the "know-how" that underlies the empirical sciences with the "know-why" introduced by the Unicist Theory.

The "know why" is needed to deal with the concepts of complex adaptive environments.

It defines that reliable knowledge implies knowing the concepts that underlie facts, which confirm the "know-why", and the justifications that confirm the "know-how" of the facts.

The integration of the unicist approach to complexity with the empirical sciences requires changing the Theory-Practice learning approach to an Action-Reflection-Action approach that allows apprehending the concepts that underlie facts and transforms them into value adding actions.

This approach integrates the "know why" required to understand complexity with the "know how" needed to generate value.



The personal experience needed to apprehend the paradigm shift

Human Adaptive behavior requires influencing the environment and managing the influence of the environment.

The decisions of mature people naturally have a purpose, a maximal strategy in order to influence the environment to generate growth and a minimum strategy to ensure survival.

This behavior is the natural behavior of wise people who always have a maximal strategy and a minimum strategy to achieve a purpose.

The knowledge of both strategies allows people to have the concepts of what needs to be done. Concepts are the drivers of human actions. Wisdom implies having conceptual knowledge in order to generate value for others.

This wisdom is possible because it has its origin in the intelligence that underlies nature. This intelligence also has a maximal strategy to expand the boundaries and has a minimum strategy to survive. Mature people naturally tend to emulate this intelligence of nature without even knowing that it exists.

The Core of the Paradigm Shift

The paradigm shift in sciences is based on the discovery of the ontogenetic intelligence of nature, which regulates its evolution.

This discovery allowed making a shift in sciences based on introducing a pragmatic, structuralist and functionalist approach that subordinates the preexisting empirical approach to deal with adaptive processes and complex adaptive systems.

The Unicist Ontology belongs to the field of Complexity Sciences

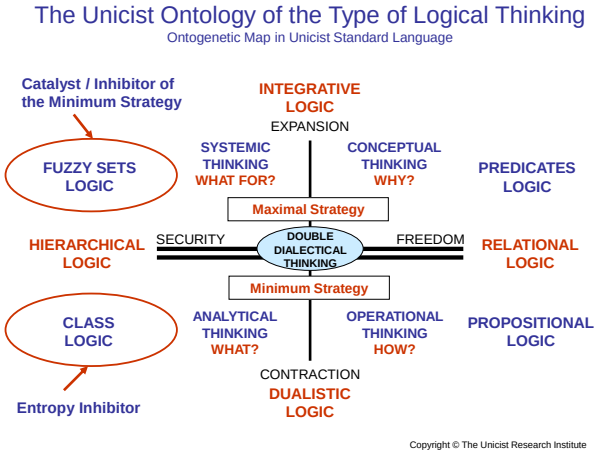
It has to be considered that ontology describes the nature of beings and is part of metaphysics.

The ontogenetic intelligence of nature provided the basics to define the nature of things and allowed developing the unicist ontology.

This unicist ontology does not belong to the field of metaphysics but to the world of complexity sciences.

This knowledge provided the information that is necessary in order to build the ontogenetic maps and ontogenetic algorithms of specific aspects of the real world in order to operate with the nature of things using their unicist ontological structures.

Scientific Approach vs. Philosophical Approach to Logic



The discovery that the logical models are patterns of human intelligence that allow solving problems in the real world, changed the category of logic, which in the past belonged to the field of philosophy, and now belongs to the field of sciences.

It has been confirmed that the logic that an individual is able to use spontaneously in the real world depends on her/his type of intelligence. This transformed the philosophical approach to logic into a scientific approach to logic.

This knowledge provided the functionality of logical models to apprehend the nature of things by emulating the logic that underlies nature. This allows apprehending the structure of concepts making them reasonable, understandable and provable.

Introduction to the shift generated by the Unicist Theory

The access to a paradigm shift in sciences requires accessing it with a different mind-set. It is necessary to have a personal experience in the field of adaptive behavior in order to categorize this paradigm shift.

The previous paradigm was based on an empiric framework that uses a dualistic logic to deal with reality. It is functional to deal with static systemic environments but does not allow managing complexity.

The paradigm shift apprehends complex environments using a triadic approach that allows managing the dynamics of complex adaptive systems.

The scientific evidences of the Unicist Theory that confirm its functionality to deal with complex systems are:

- The functionality of amino acids
- The structure of atoms
- The structure of biological entities
- The nervous system
- Similarity between natural and social objects
- Unicist concepts as stem cells
- Thinking processes and the functionality of electricity

It has to be considered that dualistic thinking is an instinctive process that is driven by the fact that the neural process is binary (the neurons are ON or OFF). A triadic approach requires using a conscious approach to integrate two pairs of binary processes united by a common "purpose" that is being achieved.

A Synopsis of the Paradigm Shift in Science
(Before and After the Unicist Theory)

As it was mentioned:

The objective of the Scientific Research developed by Peter Belohlavek at The Unicist Research Institute was to deal with complex adaptive systems.

These systems might be natural systems or artificial complex adaptive systems like cultures, institutions or information systems. The final goal was to find a solution for complexity as a universal problem.

The origin of the Unicist Theory is the discovery of the Ontogenetic Intelligence of Nature, which is implicit in all the aspects of reality.

This synopsis describes the "before" and "after" the development of the unicist approach to complexity.

The Unicist Theory changed Sciences as they are known

Before: Sciences were based on an empirical cause-effect approach that was functional in systemic environments but dysfunctional to deal with complex adaptive environments that have open boundaries and bi-univocal relationships among their components.

After: The unicist approach to sciences is based on a pragmatic, structuralist and functionalist framework that allows integrating the scientific approach to both complex and systemic environments. It subordinates the empirical approach to deal with operational aspects after the complex aspects have been managed using a unicist ontolog-

ical approach. It integrates systemic sciences and complexity sciences in a unified field.

Example in Economics: The knowledge of the unicist ontogenetic maps allow defining the structural economic solution for an entity and the use of the technical-analytical tools allows defining and monitoring the operation.

Development of the Epistemological Structure of Complexity Sciences

Before: The category of complexity sciences was inexistent as such. The understanding of complexity was simplified by using artificial palliatives, to generate pseudo-systemic structures of variables.

This implies using a dualistic empirical approach to reality.

After: All fields of reality where their evolution depends on the feedback from the context belong to the field of complexity sciences. Complexity Sciences provide solutions for adaptive environments.

Natural or artificial complex adaptive environments are approached as unified fields that are defined and regulated by their ontogenetic structures and are constituted by processes and objects that work as complex adaptive entities.

This approach implies using a triadic, pragmatic, structuralist and functionalist framework.

Example: This is the case of natural sciences, life sciences, social sciences, economic sciences, political sciences, anthropology, behavioral sciences, etc.

Discovery of the Ontogenetic Intelligence of Nature

Before: The structure that regulates the evolution of nature was unknown.

After: The structure of nature that regulates its evolution is given by the triadic structure of the ontogenetic intelligence of nature.

This intelligence is defined by a purpose, an active principle and an energy conservation principle that are integrated in their oneness defining the functionality of the entity. The active principle drives the evolution while the energy conservation principle sustains the purpose.

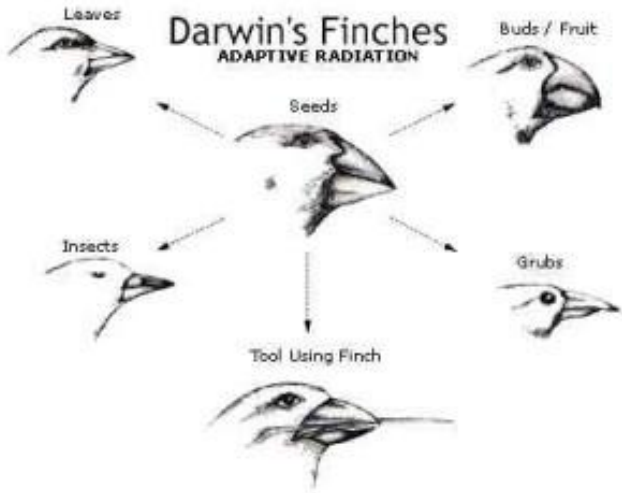
Example: 1) The structure of the human nervous system where the purpose is defined by the vital function, the active function is given by the motor system and the energy conservation is given by the sensitive system. 2) The structure of the atom where the purpose is given by the protons, the active function is given by the electrons and the energy conservation function is given by the neutrons.

Discovery that the Evolution of Living Beings is driven by a Purpose

Before: The evolution is random.

After: Evolution is purpose driven to sustain the survival of the species.

Example: The evolution of finches explained by Charles Darwin. The beak of the finches evolves to ensure the survival of the species.



Discovery of the Structure of the Unified Field in Nature

Before: The apprehension of the Unified Field has been an unsolved problem in sciences. The apprehension of nature was considered as part of intuition and an evidence of wisdom.

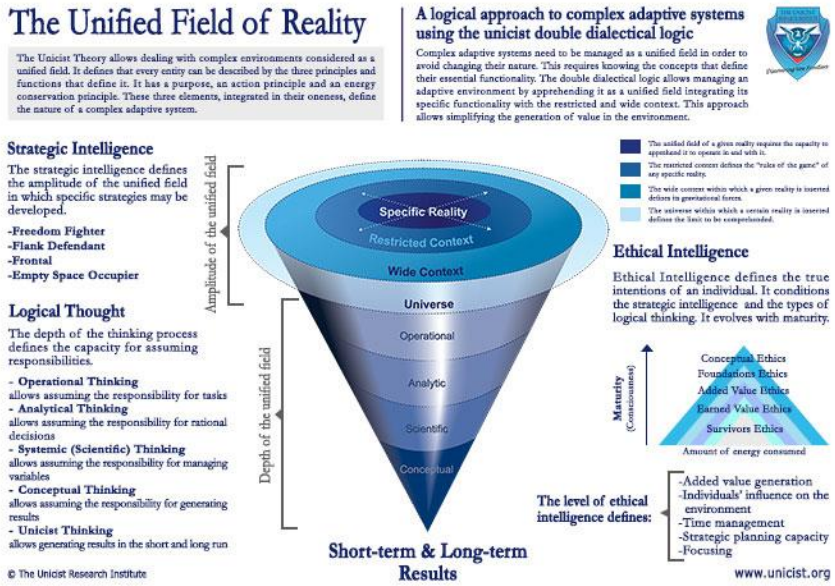
After: The Unicist Theory gives access to the triadic structure of the unified field in nature that defines the concept that regulates its evolution.

The discovery of the triadic functionality of ontointelligence allowed apprehending the unified field in nature. It solved the problem of the integration of solutions that are incompatible at an operational level.

This intelligence, which is used by individuals to apprehend the nature of a reality, is integrated by the ethical intelligence, the strategic intelligence and the logical thought. It requires being able to deal with the ambiguity implicit in any complex environment.

It opened the possibility of making the emulation of nature reasonable, understandable and provable. It defines the possibility of managing different levels of complexity in the real world.

Example: The ethical intelligence is the deepest intelligence of human beings that evolves with their maturity and defines the true intentions of individuals when dealing with the environment. It is functional when it is consistent with the ethical intelligence of the environment.



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

Discovery of the Basic Law of Evolution

Before: The structure of nature was unknown therefore there were no laws of evolution

After: The evolution implies that the active principle drives the evolution of an entity while the energy conservation sustains the status quo.

When the energy conservation principle prevails, the entity becomes stagnated in order to survive.

Example: 1) The change of the beak of finches is an example of evolution. 2) The encystment of microorganisms is an example of the prevalence of the energy conservation principle.

Application of the Unicist Ontology of Evolution to Future Research

Before: The evolution of living beings or complex adaptive environments was forecasted based on experiential benchmarks, the consensus of expert opinions or the use of intuition (Nostradamus and others).

After: The unicist approach to evolution is based on discovering the unicist ontological structure of an environment and using the signs and symptoms in order to infer the future using the principles of evolution. The opinions of experts are used as destructive tests, while pilot forecasts are used as non-destructive tests.

Example: The development of county future scenarios or business long-term planning.

Discovery of the Organization by Objects of Nature

Before: The Complex Adaptive Systems were managed as systemic systems to manage their processes and functions.

After: Complex adaptive systems, being natural entities or artificially created, are integrated by objects, which are integrated in a unified field.

Each object is an interdependent autonomous entity that fulfills a function and has a quality assurance that ensures its functionality.

Example: 1) The human body is integrated by objects that are evident to everyone and other objects that are not. The organs of the body are objects that are evident and the amino-acids belong to the category of not evident objects.

2) Countries are social entities organized by objects that function as institutional roles.

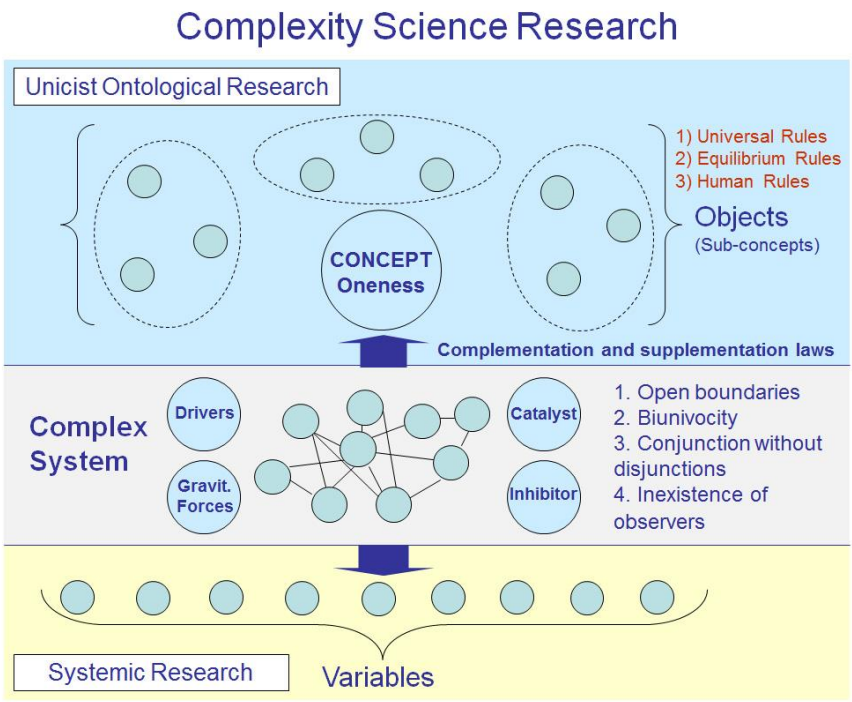
3) Institutionalized businesses are complex adaptive entities that are organized by objects and functional roles to ensure their permanence.

Development of the Research Framework for Complexity

Before: The Empiric frameworks were used in order to falsify hypotheses.

After: The use of a Pragmatic, Structuralist and Functionalist framework was the basis for the development of destructive tests to define the limits of knowledge and non-destructive tests to confirm the functionality.

Example: 1) The research of complexity has to be done in a real environment and not in artificial environments. 2) The research of complex environments requires an ontological research focused on the objects that integrate a complex adaptive system.



Development of the Unicist Epistemology to Build Reliable Knowledge

Before: Empiric knowledge is validated by confirming its justifications.

After: Reliable knowledge of complex systems is validated using "foundations" to confirm the functionality of their concepts and justifications to confirm the operational aspects.

Example: The statistical validity of human behavior needs to be applied based on considering that each conceptual segment of a population is an independent universe.

Discovery of the Relationships between Elements in Nature

Before: There was no knowledge about the conceptual structure of the relationships in nature.

After: The relationships between the elements that integrate a unified field are complementary or supplementary.

There are no other types of relationships among the elements that integrate a unified field than those of complementation and supplementation.

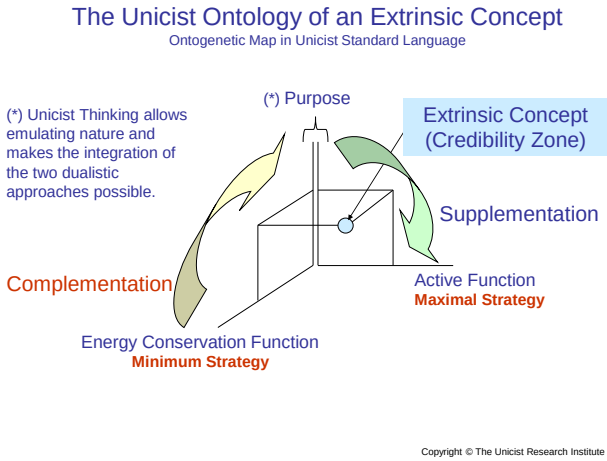
Example: The purpose and the active function of a concept have a relationship of supplementation. The relationship between the purpose of the concept and the energy conservation function is based on a complementary relationship.

Discovery of the Structure of Extrinsic Concepts and Mental Concepts

Before: (1724 – 1804) Immanuel Kant defined that concepts have a functional meaning that is the framework of any action.

After: The concepts of non-living entities have the same structure of the ontogenetic intelligence of nature, defined by a purpose, an active function and an energy conservation function that define the extrinsic concepts.

These functions work as a unified field that drives human action. The extrinsic concepts define the functionality of things and are deposited by humans in order to manage their nature.



The structure of extrinsic concepts is timeless and cross-cultural; their credibility zone is defined by the environment and its conjuncture. They exist as long as the function exist. The mental concepts are the concepts that guide the actions of individuals and are stored in their long term memory.

Example: The concept of leadership is integrated by a purpose, which is to sustain the authority of an individual, its active function is given by the participation with the group and the energy conservation function is given by the power that an individual has to influence the context.

Development of the Unicist Ontology

Before: Ontology was an approach to apprehend the nature of reality, which belonged to the field of philosophy.

After: Unicist ontology is a structured approach to apprehend the nature of complex adaptive systems using an emulation of the ontogenetic intelligence of nature.

The unicist ontology is necessary to deal with Complexity Sciences because it allows defining the concepts that guide actions.

Example: The nature of any strategic approach to reality implies an emulation of nature meaning that there is a purpose to be achieved, the active function is given by a maximal strategy that drives beyond existing boundaries in order to provoke evolution, and the energy conservation function is given by a minimum strategy that ensures survival.

Discovery of the Structure of Complex Adaptive Systems

Before: The complex adaptive systems were considered as systemic systems. They were managed considering their functional elements as variables.

After: A complex adaptive system is considered as an open system, in which the conjunction of objects and/or subsystems determines the functionality of the unified field.

These systems have no variables but objects that are integrated by the conjunction "and". In complex systems there is no "or" in the relationships of their objects.

Example: The human body is a paradigmatic example of a complex adaptive system that has no variables. It has objects that fulfill functions and processes that establish the relationships between these objects. The organs of the body are evident objects.

Discovery of the Intelligence to deal with Complexity

Before: The use of analogical thinking was dominant and critical thinking was a superior approach to adapt to the environment.

After: The ontointelligence to deal with the unified field of complex environments was discovered. This drove to the integration of ana-

logical thinking, critical thinking and unicist thinking that allows apprehending the unified field and fundamentals of a given reality. Analogical thinking is spontaneous and based on genetic intelligence, critical thinking requires an analytical thinking process and unicist thinking demands the use of a unicist reflection process.

Example: The design of solutions of complex problems.

Development of the Double-dialectical Logic

Before: The logical approach to deal with sciences was based on empiricism, which requires the use of a dualistic approach in order to disregard the unified field of complex adaptive systems.

Dualism has two main justifications that sustain the artificial isolation of aspects of reality. On the one hand, the "Truth Tables" (True or False) are an example of dualistic logic that is functional to manage systemic functions. But they are dysfunctional to deal with the unified field of complex adaptive environments. On the other hand, "Ceteris Paribus" is a fallacious solution to isolate variables or aspects of reality that is based on defining all other aspects of a problem as constants. It is used to confront adaptive environments without needing to adapt.

After: The double-dialectical logic is an integrative logic based on the use of conjunctions to define the structure of the unified field of complex adaptive systems using double-dialectical thinking.

The elements included in complex environments are not true or false. They are defined by their levels of functionality. Their functionality is defined by the value generated by the integration of their triadic functions that require the use of the logic of double-dialectics in order to be understood.

Example: Both the dialectics of Hegel and Marx have a dualistic basis using a thesis-antithesis model that drives to a resulting synthesis.

But cultures have homeostatic elements that participate in the social process which implies a triadic dialectical approach defined by a thesis-antithesis-homeostasis model.

To access a triadic approach with a dualistic mind-set (the neurons are on or off) it is necessary to use a double-dialectical model that integrates thesis and antithesis in the active function with the thesis and homeostasis in the energy conservation function.

The double-dialectical logic is a mind-set that needs to be used to emulate the ontogenetic intelligence of nature in order to manage concepts to deal with complex adaptive systems.

Part II
The Core Aspects of the Unicist Theory

The Unicist Theory explains the dynamics and evolution of living beings and complex adaptive entities.

The Unicist Theory

The Unicist Theory, developed by Peter Belohlavek, explains the dynamics and evolution of living beings and complex adaptive entities. It is a paradigm shift of the scientific approach to complex adaptive systems. It substituted empiricism by a pragmatic, structuralist and functionalist approach and replaced knowledge falsification processes with destructive testing processes.

This theory provides an approach to complexity based on the use of the unicist logic that emulates the intelligence that underlies nature. It integrated complexity sciences with systemic sciences in a unified field.

The Unicist Theory allowed understanding and influencing the evolution of living beings and artificial complex adaptive systems. This influence is exerted by using unicist logic based and object driven technologies, which is now a worldwide trend.

The Unicist Theory to deal with Adaptive Systems

The Unicist Theory was developed at The Unicist Research Institute to deal with complex adaptive systems and their evolution.

There are fields that are generally accepted as being complex such as: Life-sciences, social sciences, anthropology, political sciences, economic sciences, behavioral sciences, medicine, psychology, education, businesses, ecology and meteorology. The research began in 1976 and the expansion of its applications is still ongoing.

The Unicist Theory comprises the following discoveries:

- The **Ontogenetic Intelligence of Nature**, which describes the essential structure of nature that drives its functionality and evolution.

- The **Unicist Ontology**, which is a model that allows emulating the ontogenetic intelligence of nature in order to make it apprehensible.
- The **Unicist Logic**, which allows emulating in mind the triadic structure of the ontogenetic intelligence of nature using a unicist double dialectical thinking process.
- The **Unicist Conceptualization**, which establishes the process of apprehending the concepts that represent the unicist ontology of an entity using unicist logical thinking.
- The **Unicist Ontology of Evolution**, which establishes the basic rules of evolution and involution.
- **Ontogenetic Maps**, which describe the unicist ontogenetic algorithm of complex adaptive systems.
- **Unicist Objects**, which are adaptive systems that integrate complex systems to drive their functionality.

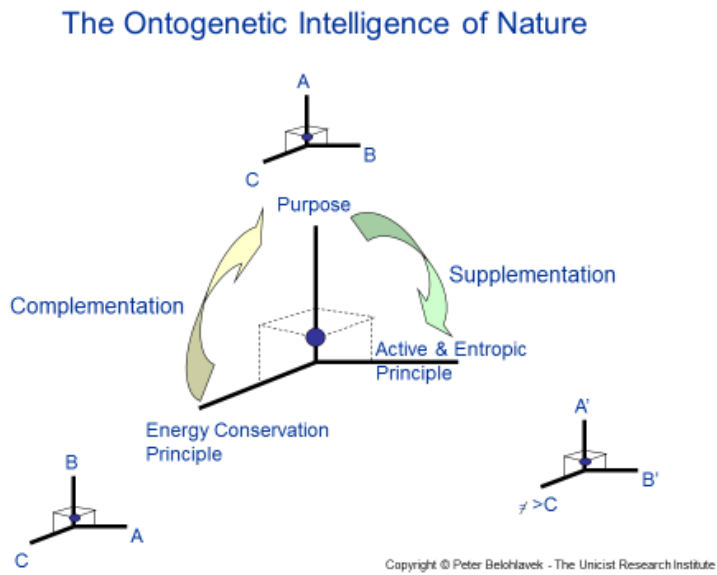
The Ontogenetic Intelligence of Nature

The ontogenetic intelligence of nature defines the basic laws of evolution. It is a set of what can be called natural laws or principles which rule the evolution of living beings.

The ontogenetic intelligence is defined by two principles of nature:

1) The action principle that sustains growth and evolution. It is driven by expansion.

2) The energy conservation principle, which sustains survival and avoids involution. It is driven by contraction.



In the field of human behavior, the action principle gives birth to the active function, which makes the fulfillment of purposes possible. The entropy produced by action produces changes in the goal of purposes.

To avoid changes and sustain the purpose, the energy conservation principle gives birth to the energy conservation function and produces a homeostasis. The energy conservation function complements the purpose and ensures that action occurs within the established limits.

But the consequence of this interaction is never deterministic. The change produced by the interaction of the living being with the environment produces evolution or involution.

In nature, both principles sustain the evolution of living beings. Their effects can be observed in bacteria, viruses, cells, and other living beings.

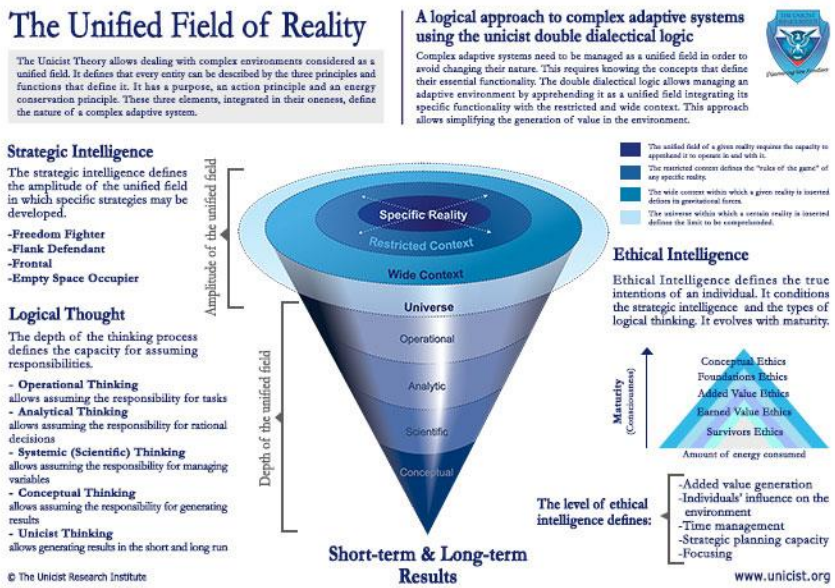
At a more operational level, besides the expansion and contraction principles, there are functions that provide security and functions that provide freedom to living beings. These functions are implicit in the upper level functions (expansion – contraction).

The ontogenetic intelligence of nature provides the basic rules to adapt to an environment. It sustains the living being's unstable equilibrium.

When, for any reasons, the ontogenetic intelligence is inhibited, the living being loses its stability and its survival is endangered. These principles are active in individual beings and in the live environment they are part of.

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

No subordinate, opponent or dominant individuals can apprehend a unified field. This is a restriction posed by man's own mind.

Operating in a unified field of a certain reality, working in and with it calls for a previous capacity to apprehend it. Even though the unified field of a given reality includes its most abstract aspects; there is no

chance to actually apprehend it if it does not encompass its most concrete aspects as well.

Operation is the demonstration that one has apprehended the essence of a given reality. The term “wisdom” stems from “the ability to do”.

The depth with which a unified field may be apprehended depends on the type of thought of individuals. One may apprehend unified fields in their most operative aspects or go as far as possible, but always including its operative aspects.

The different types of thought imply different depths of apprehension of a unified field.

Many times, acting on a unified field does not require managing essential aspects since the latter are not functional to what one wants to do. For instance, in order to make a program in a computer there is no need to know the conceptual aspects of a computer.

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.

The Unicist Ontology

The unicist ontology describes the nature of ideas, facts, individuals and things, regarded from their essential, causative / functional and operational aspects, erasing the existent barrier between the human arbitrary division of philosophy, science and action.

The unicist ontology defines the concepts that integrate reality as a unified field. In the short or long run, living beings and their deeds are consistent with their nature which is defined by its concept.

Living beings naturally transfer their functionality to the environment where they act, depositing functions that have the living being's same logical structure and that generate the existence of extrinsic concepts.

Extrinsic concepts have the same logical structure but they are not implicit in inanimate beings; they are deposited by the living beings they are functional to.

This is the origin of the ontology that has been used for many years in philosophy and now also in the field of systemic sciences and complexity sciences to deal with adaptive systems.

This is what unicist ontology is about. We call systemic sciences those that are driven by univocal cause effect relationships.

Considering its functionality, every specific reality and its nature is unique. Therefore, the ontology of an adaptive / complex system, regarded from a functional viewpoint is unique.

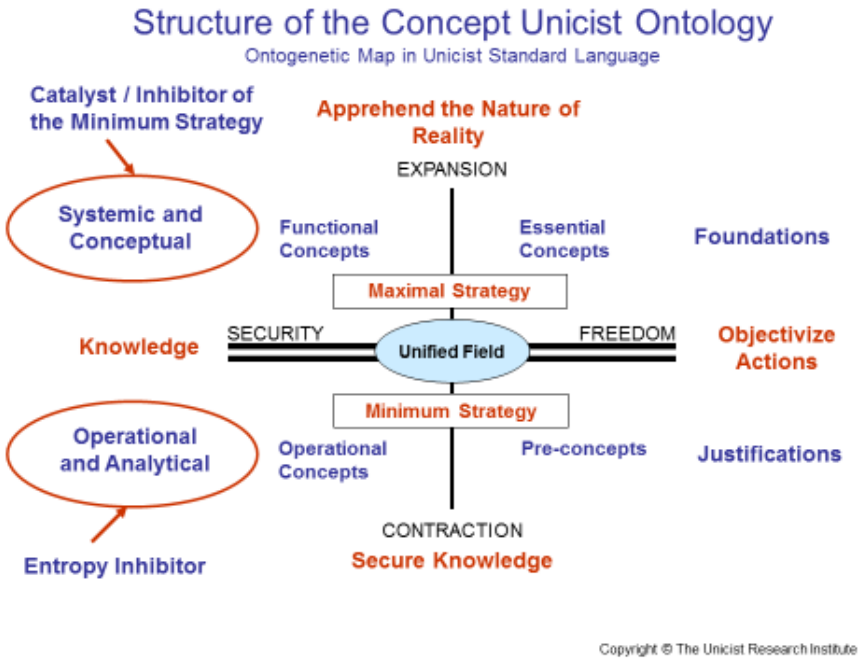
There are no multiple ontologies for one functional reality. There are multiple operational ways to fulfill the purpose of its nature. That is why this approach defines the possibilities but is not deterministic.

Functionality is implicit in unicist ontology, because it describes reality based on its functional nature. That is why unicist technologies, which result from unicist ontology's applications, belong to the field of complexity sciences.

Approaching complex systems requires the knowledge of their ontology. By knowing the ontology of a complex adaptive system, the system becomes reasonable, comprehensible and predictable, and therefore it can be approached in scientific and operational terms.

The unicist ontology of a reality has been apprehended when reality evolves according to its natural laws. The unicist ontology cannot be

measured in itself but it can be evaluated based on evolution prognostics.



The Unicist Ontological approach requires the description of concepts that describe different functional levels. In living beings, the concepts that define their nature are included within their biological system.

On the other hand, external elements have extrinsic concepts, which are deposited by humans. When the ontology of a certain reality is apprehended, it describes the most basic human functionalities. This explains why these functionalities do not mutate but just evolve.

-Operational concepts describe the functional aspects of a reality.
-Functional concepts describe the causative taxonomies of a reality.
-Essential concepts describe their essence in its oneness.

Ontological research requires a very high level of abstraction:

- Reasoning processes are used to approach the research of rational aspects.
- Emotions are used to approach the research of emotional aspects.
- Reflection is used to approach the research of ontological aspects.

The hypotheses proposed by any of these three types of researches are falsified measuring facts.

The unicist ontology is the integrating element of the unicist approach. It integrates the complex problem solution, its purpose, with human action (unicist anthropology) to influence the context.

Unicist Anthropology is a unicist ontological approach to anthropology. It integrates human behavior both in its individual and social aspects. It is the engine that fosters the development of men's conceptual approach to reality.

Thus, the unicist ontology is an approach that sustains the management of complex problems by researching their conceptual structures.

Since this functional structure is unique, it establishes secure knowledge to influence complex problems to manage adaptive systems.

The limit of "objectivity" depends on human's capacity to approach complex realities.

The Unicist Logic and its Mathematics

The Unicist Logical Approach was developed to deal with adaptiveness. It is necessary to emulate the dynamic structure of adaptive systems in order to influence them. It allows dealing with living beings or any complex adaptive system.

It is based on the discovery of the intelligence that underlies nature and of the roots of human intelligence which allowed discovering and emulating the structure that underlies living beings and complex adaptive systems and drives their evolution. This structure was named concept.

Concepts define the intelligence of an adaptive system and are integrated by a purpose, an active function and an energy conservation function.

The active function defines the maximal strategy of an entity to sustain growth, reproduction and change while the energy conservation function defines the minimum strategy to ensure the individual survival.

The knowledge of the concept and the maximal and minimum strategies allows dealing with living beings or any complex adaptive system. The Unicist Logical Approach was developed to deal with life sciences and personal, institutional and social behavior in order to develop strategies to influence the environment.

Adopting the Unicist Logical Approach to deal with the adaptive aspects of systems implies managing their concepts and using maximal and minimum strategies.

The approach to conceptual structures of reality requires going beyond dualistic thinking to apprehend the dynamics of complex adaptive systems.

Using the unicist logic enables us to validate diagnoses and forecasts about reality based on its nature. This way, unicist logic becomes functional to understand the dynamics of complex realities.

The Mathematics of the unicist logic was developed to define the field of the possibilities to influence a reality and the probabilities of being successful when doing so.

The unicist mathematical solution is very simple. Considering the three dimensions that underlie a given reality, the integration of the three elements is given by their multiplication.

Unicist Double Dialectical Logic

The Unicist Double Dialectics describes the human rational approach when an individual emulates the functionality of nature.

The unicist thinking process is basic to influence complex realities.

The access to double dialectical thinking implies both a change in the paradigms to approach reality and exert influence on it and a consistent learning process.

Human mind is based on a “dualistic” processor; neurons are either “on” or “off”.

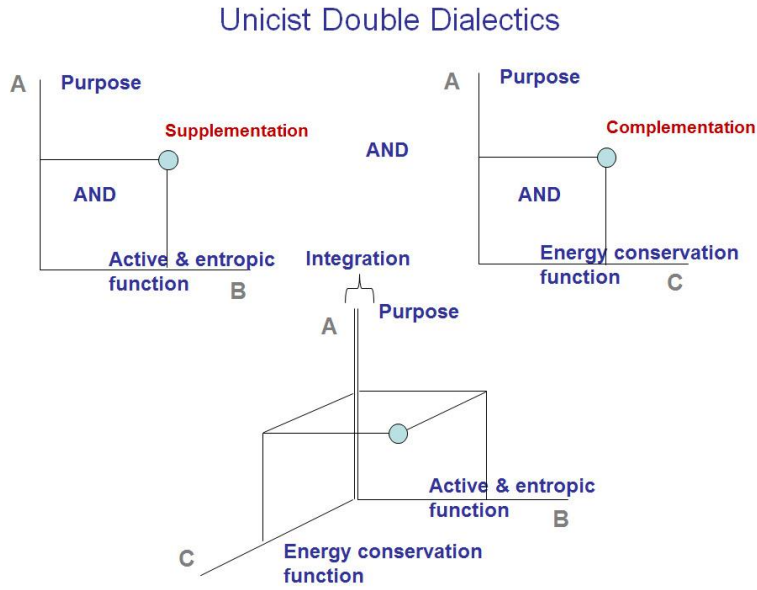
The unicist ontology on which unicist theory is based states that every “object” of reality has an implicit or explicit purpose, an active function to put it into action and an energy conservation function to maintain it stable.

These three components are integrated in its oneness.

The understanding of a reality begins with the discovery of its purpose. After the purpose has been approached it is possible to build the first dialectical pair.

The active function is the antithesis that puts the purpose into action while its implicit utopia tries to change it. If there was no entropy inhibiting element, this situation would evolve into a dysfunctional result regarding the original purpose.

After the first dialectical pair functions, the second dialectic is born. The purpose is sustained by the energy conservation function. This function is a complementary element that limits the effects of the active function to secure the maintenance of the objectives implicit in the purpose.



Unicist Logic requires emulating in mind the complementary and supplementary relationships that integrate the double dialectic.

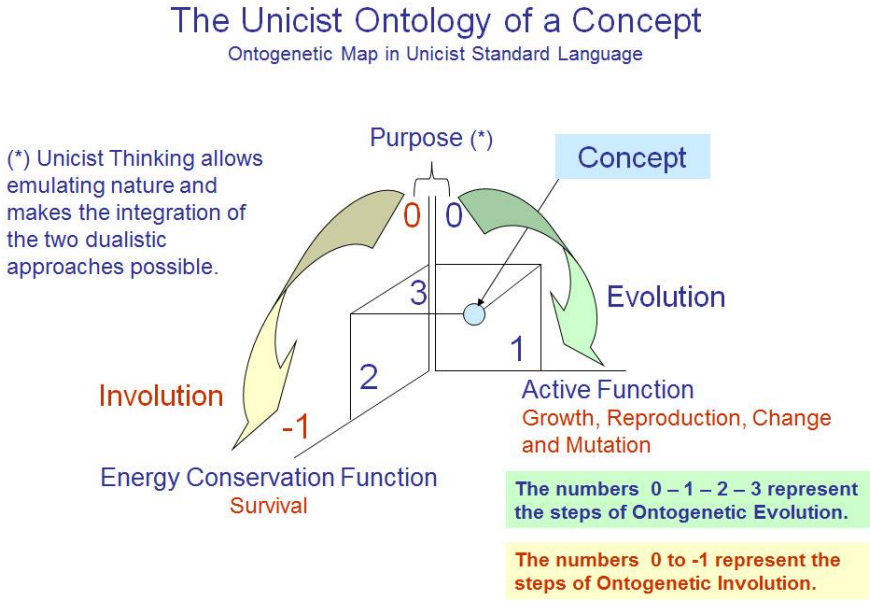
The elements that are part of an entity in nature are integrated by supplementary and complementary relationships. There exist no other types of relationships in nature.

These relationships can be perfect or imperfect. When they are perfect the entity evolves in a stable way, when they are imperfect they generate a high level of entropy.

The Structure of Concepts

The discovery of the ontogenetic intelligence of nature allowed finding the roots of evolution, involution and mutation.

This intelligence drives the purpose of the living entities in nature based on an active principle that sustains growth, change and mutation and an energy conservation principle that saves energy while it sustains survival and the purpose of controlling the entropy produced by the active function.



This structure that regulates the nature of living beings was named intrinsic concept and is described by a unicist ontological structure that was named ontogenetic map.

In a specific living entity, the active principle becomes an active function and the energy conservation principle an energy conservation function.

This structure underlies the living beings, their actions and deeds. When dealing with inanimate functional entities the concepts were defined as extrinsic because they are deposited on them by the living entities. They are also defined as having a purpose, and active function and an energy conservation function.

These concepts are abstractions that describe the essences of the functionality of an entity. When approaching the concept of an entity it has to be considered that while the active function of a concept can be observed and measured, the energy conservation can be perceived and the purpose needs to be intuited.

As the structure of a concept in its unit is a complex system that cannot be observed, the only way to confirm conceptual knowledge is by measuring the results of the actions the concept regulates. This implies that concepts can only be confirmed by the facts they produce.

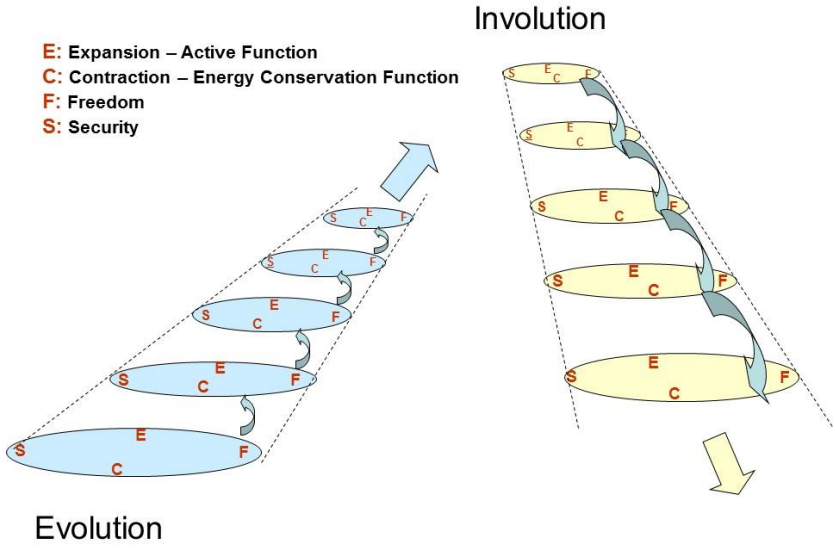
Therefore, the confirmation of conceptual knowledge requires forecasting the evolution several times and measuring results produced until the forecast becomes accurate and the structure of the concept can be considered as valid. Five accurate forecasts are considered to be necessary to validate a conceptual knowledge.

Unicist Ontology of Human Evolution and Involution

When an individual is in an evolution cycle there is no risk of failure. The individual makes all the necessary actions to ensure evolution. Human efficacy depends on the fundamental driver of individuals.

Efficacy requires fallacious free actions. The research on human evolution included finding the natural taxonomies of evolution and involution.

When we talk of involution we mean a degradation of the purpose of an individual in order to reduce the energy required to deal with reality.



When dealing with complex problems it is frequently seen how individuals avoid responsibility replacing the original purpose with a subordinated objective in order to "ensure" success.

The Unicist Ontology of Evolution

Evolution implies the existence of an ontological algorithm to achieve a purpose. The first step appears to be putting the purpose into action.

This implies a previous step: the understanding of the purpose.

Then the first step is putting it into action. Without understanding no action is possible.

The second step is then finding a way to optimize the energy; thus the energy conservation principle is applied.

When this algorithm is respected and successful, individual are evolving. This implies that they add value to the environment, obtain the counterpart and learn from the environment at the same time.

Evolution implies being aware of reality and making conscious actions in order to adapt to the environment.

The Unicist Ontology of Involution

Humans cannot deal consciously with involution. Involution implies naturally an unconscious behavior of the individuals involved.

The degradation of the objectives is the natural answer of individuals who cannot deal with a reality.

When an individual is unable to adapt to an environment in order to influence it s/he will naturally degrade the problem in order to be able to influence it.

When this process is done consciously the individual is learning. But when the individual does it unconsciously the individual is involving. Involution implies an entropic behavior of individuals in order to find an easier way to deal with problems.

We have researched the mechanic of involution in order to forecast behaviors and build the necessary entropy inhibitors in order to avoid it.

Involution begins at the same stage as evolution: understanding the purpose.

But when an individual cannot adapt to the environment s/he chooses to begin by conserving the energy in order to gain time to understand this reality.

This behavior is unconscious and produces paradoxical results. It drives to develop the necessary actions that are within the minimum strategy that is implicit in the energy conservation principle in order to survive.

Thus the survival of the individual is achieved but the purpose is left behind. Humans cannot accept that they changed a purpose. To avoid this perception, individuals build the necessary fallacies.

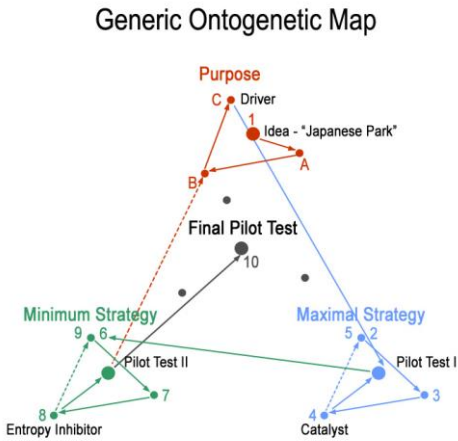
The Ontogenetic Maps

Ontogenetic maps are a conceptual GPS to generate solutions in the field of complex adaptive systems.

They describe the ontological algorithm of a function or the whole system providing the steps that have to be followed to influence the environment while being influenced by it.

Ontogenetic maps are timeless and cross-cultural but their applicative content varies based on the characteristics of the environments.

The use of ontogenetic maps and their implicit unicist ontological algorithms is the input for complex problem solving making the building of a solid structure possible.



What are Ontogenetic Maps?

The integration of the ontogenetic intelligence of nature, the anthropological invariables and human ontointelligence made the development of the ontogenetic maps possible.

These ontogenetic maps are timeless meaning that they are valid as long as the function they represent exists.

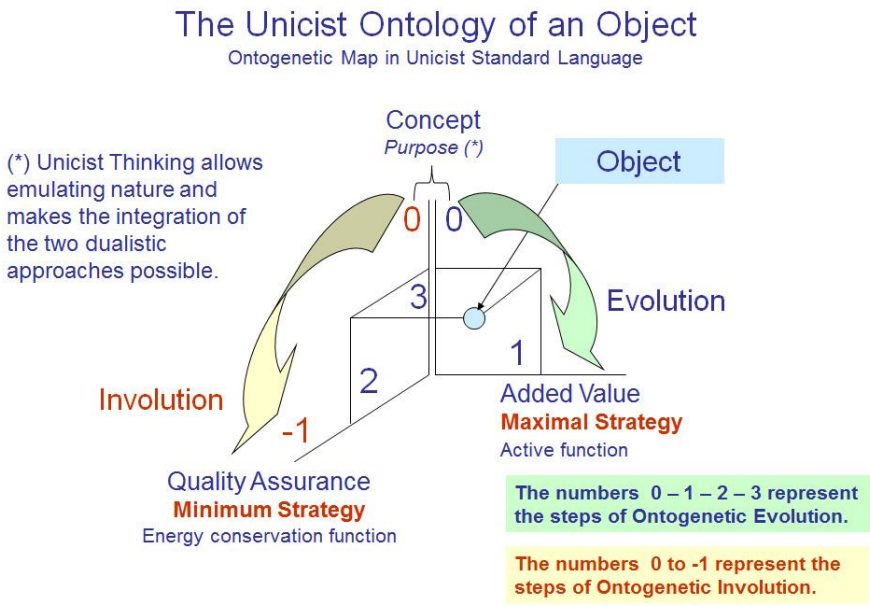
For example, the ontogenetic map of a lifeboat exists and remains unchanged as long as its function exists. Technologies change, cultural contexts are different but the ontogenetic map of the lifeboat remains the same.

Ontogenetic maps are cross-cultural because the integration of the ontogenetic intelligence of nature with the anthropological (cultural) invariables defines the nature of a function in synthetic language.

On the one hand, this makes the unicist ontological structures self-evident in any culture and, on the other hand, it makes the ontological algorithms that define the ontogenetic maps, be perceived as logical because they follow the natural way something needs to be developed.

The Unicist Objects

An object is an adaptive system that generates value in an adaptive environment. The structure of an object implies a concept, a value added to the environment where it operates and an assured quality which makes it absolutely reliable.



Concept

The concept implies the fact that there is purpose, a procedure and a course of action in each object. There are always a "substantive" function, and action upon the environment and an adverbial function which try to prevent the action upon the environment from deviating from the purpose.

The concept of an object defines, due to the broadness of its purpose, the unified field of analogous applications. Because of the functional-

ity of its purpose, it defines the broadness of the homologue applications.

The concept of an object requires a very deep and subtle apprehension. Should it not be consistent, the object becomes an "operational thing" or procedure which lacks an object's characteristics, and its reusability and quality assurance are uncertain.

Added Value

The object adds value as a key action. It is there to add value. This added value has objective and subjective aspects, as well as costs. When the added value is reusable, the object has a cost, which is distributed among all its uses or the number of times it is used.

When the subjective added value is significant, the value of the object increases. The subjective added value is related to the value of use in itself, the reference value and the opportunity value.

The added value definition determines the operational functionality of an object and it is the basis for its analogous applications. In the analogous applications, it is necessary to integrate the object's remaining elements, i.e., its concept and quality assurance.

The added value is briefly determined by the utility, functionality and redundancy of the processes.

Quality Assurance

Quality assurance depends of the capacity of handling the added value development redundancy. Redundancy should be analogous so that the results of the quality assurance can be guaranteed from an operational viewpoint.

The moment the processes are developed mainly determines the assured quality. If they are out of time, they are useless; they could be considered undelivered.

The chronological time control for the object processes to occur mainly determines the added value of an object.

However, it requires a constant tuning with the objective implicit in the concept so as to prevent the object from generating added values, which actually do not correspond with the purpose for which it was created.

Part III
Scientific Evidences of the Unicist Theory

Scientific Evidences of the Unicist Theory

This document provides the scientific evidences and the theoretical framework that sustain the Unicist Theory that deals with complex adaptive systems.

The objective of the research on the scientific evidences of the Unicist Theory was centrally focused on:

1) Confirming the existence and functionality of the ontogenetic intelligence of nature.

2) Confirming that the unicist ontology emulates the ontogenetic intelligence of nature and allows defining the structure of complex systems.

3) Confirming the functionality of the unicist double dialectical logic to go beyond dualism, which hinders apprehending reality as a unified field, in order to be able to emulate the intelligence of nature in mind.

4) Confirming that concepts are defined by the ontological structure of an entity and, as Immanuel Kant already discovered, have a functional meaning that is the framework of any possible action.

5) Confirming the functionality of unicist objects that are built emulating the objects in nature like the organs in the human body.

The objective of the development of the Unicist Theory was to find a structural solution to deal with complex adaptive systems considering their characteristics. Complex adaptive systems have, among other aspects, open boundaries and are integrated by the conjunction of

their elements. In such systems, there is no possibility for the existence of observers.

The research on complex systems required the development of a new research methodology considering that the traditional scientific method was dysfunctional to approach such systems. The inexistence of observers, the openness of the boundaries and the existence of bi-univocal cause-effect relationships of the entities that integrate a complex system made the traditional approach dysfunctional.

It required defining a new path in research that included both destructive and non-destructive testing in real actions in order to confirm the validity of knowledge. The traditional scientific papers are not suitable because there can be no observers.

The unicist research methodology is based on dealing with the nature of the complex systems, which is defined by their unicist ontology (named concept), and forecasting their functional results, which requires refining the concept until the results are accurately forecasted.

In this document you will find seven scientific evidences of the Unicist Theory that confirm its functionality to deal with complex systems.

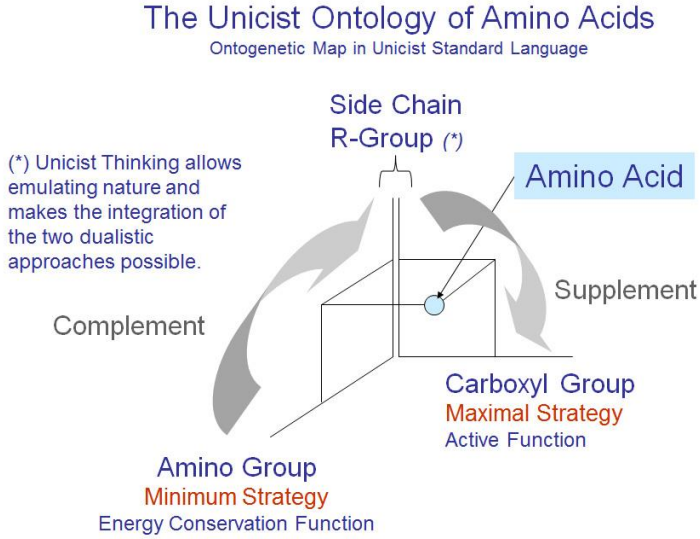
These evidence are:

1) The functionality of amino acids
2) The structure of atoms
3) The structure of biological entities
4) The nervous system
5) Similarity between natural and social objects
6) Unicist concepts as stem cells
7) Thinking processes and the functionality of electricity

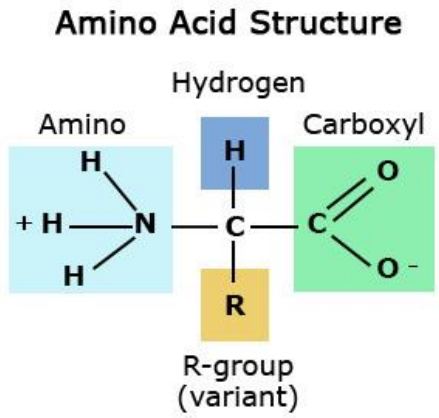
Evidence I:
The Functionality of Amino Acids

The Unicist Ontology of amino acids allows understanding its functionality and the possibilities of their integration to build proteins. Their purpose is given by the side chain which defines the different functions amino acids can fulfill.

It has to be considered that the Unicist Ontology emulates the ontogenetic intelligence of nature that was discovered which defines that there is always a purpose, an active and entropic principle and an energy conservation principle. The unicist ontology of amino acids is a demonstration of how this intelligence works.

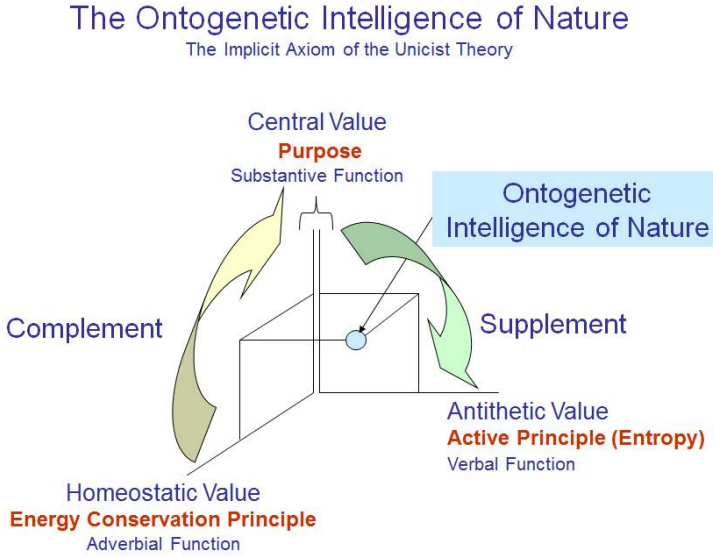


The active function of an amino acid is given by the carboxyl group that establishes a supplementary relationship with the R-group. The energy conservation function is given by the amino group, which establishes a complementary relationship with the R-group.



Evidence II:
The Structure of Atoms

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

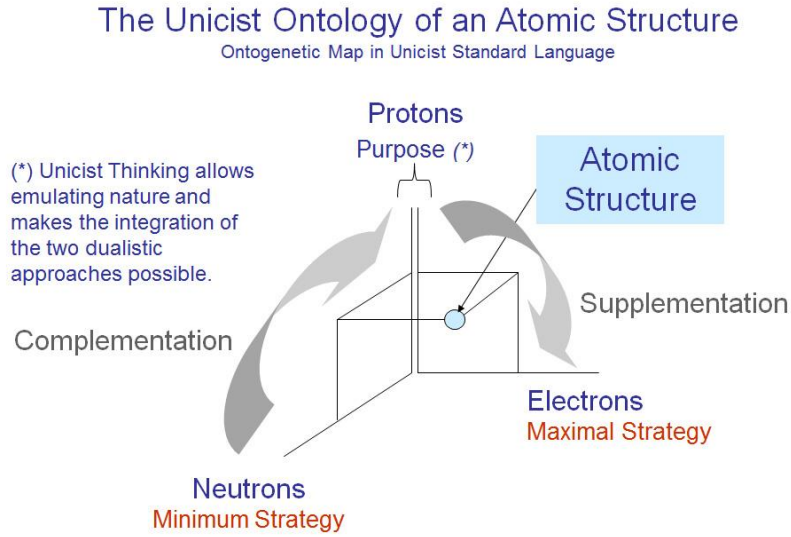


The purpose can also be defined as the substantive function, the active principle as the verbal function and the energy conservation principle as the adverbial function.

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

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.



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.

Evidence III:
The Structure of Biological Entities

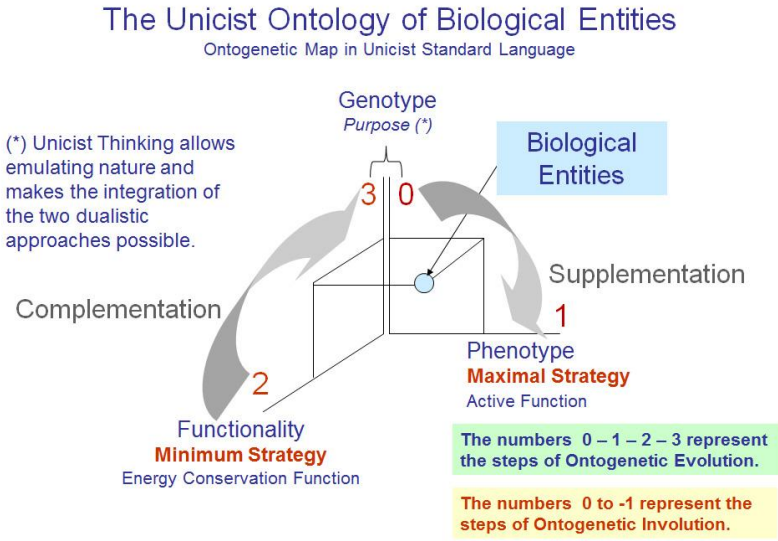
The unicist ontology of a "biological entity" defines its structure and functionality in an environment.

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.



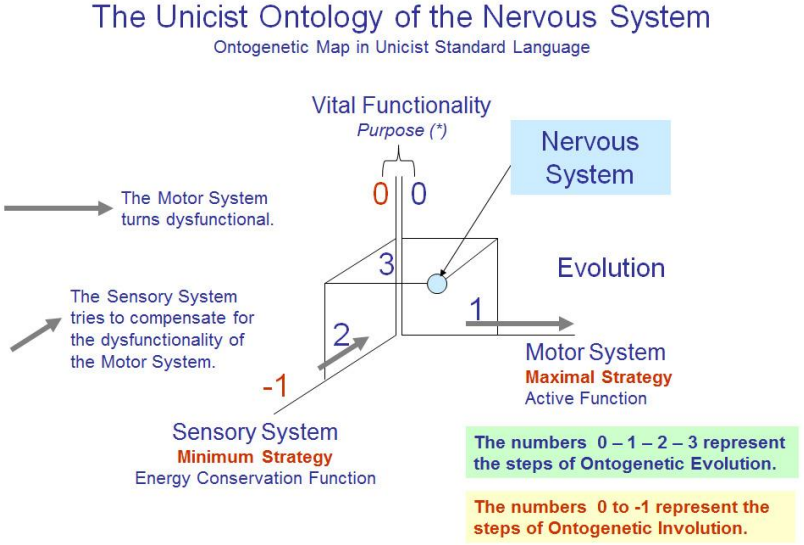
Functionality is measured in the capacity of adapting and growing on the one hand, and surviving, on the other hand.

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.

Evidence IV:
The Nervous System

Evolution of a given reality, once we know the *concepts map*, starts with a modification of an action.

If we observe the functionality of the human nervous system and assess it in a conceptual way, we will notice that if the motor system performs dysfunctional actions to the vital function, such as, putting a hand on fire, the sensory system shall have to develop maximum capacity to endure the pain to avoid the situation from destabilizing.



But if the sensory system can no longer compensate the dysfunctional action performed by the motor system, the withdrawal of the hand from the fire takes place, or a functional alteration in the hand that the man has placed on the fire, hence losing the vital functionality of the said one.

The functionality area of the member disappears and its function becomes “0” (zero).

It ceases to comply with its function within the living organism that will need to make up for its lack with other functions capable of complying with the same role and task.

Evidence V:
Similarity between Natural and Social Objects

The behavior of human organs and the fallacies of organs is an evidence that the objects in nature have a similar behavior than objects in social life.

Objects are adaptive systems that generate value in an adaptive environment. They are autonomous interdependent entities that integrate a complex system. Objects generate fallacies to survive when their existence within a living being is endangered.

It is also the case of social roles, which are objects in social or institutional environments. Fallacies are created when the existence of a social role is endangered in order to survive.

The paradox is that these fallacies produce a short term survival of the object although the whole system is endangered. But individual survival actions always prevail over collective survival. The behavior of social objects and organic objects is similar.

The case of the fallacious behavior of kidneys as objects, will be presented as an example for their behavior in the human body.

The fallacies of organs are either movement or inaction fallacies. They are natural responses when the survival of the object-organ is being threatened by the "system" that pretends to ensure the survival of the organ in spite of the consequences on the whole body.

Fallacy of Kidney's Behavior

The kidney generates fallacious responses when it is threatened by dysfunctional blood flow. The kidney decides to survive itself in spite of the consequences on the organism.

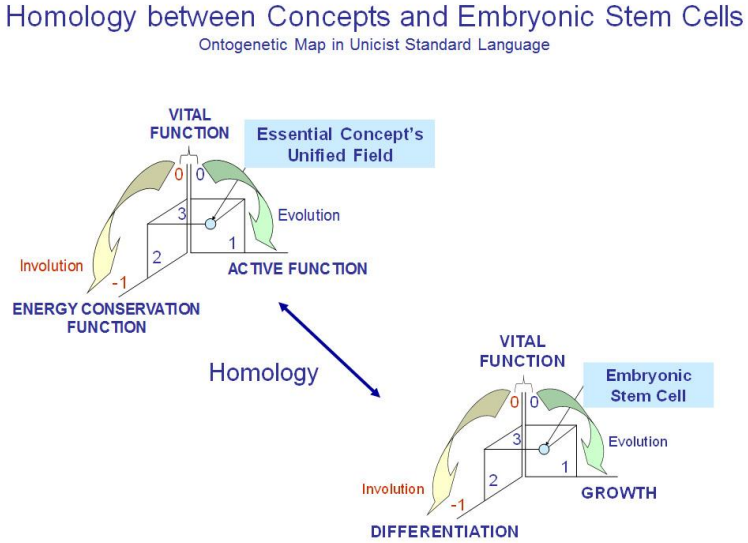
Among other causes, renal failure is produced when the kidney is left with insufficient blood flow. This can be produced by:

1) Low blood pressure
2) Reduced blood flow
3) Low blood volume

The kidney needs to compensate this lack of blood pressure by developing fallacious responses. The fallacies of the kidney drive to chronic diseases or to destroying the organism and dying with it.

Evidence VI:
Unicist Concepts as Stem Cells

The function of stem cells in the human body is homologous to the function of concepts in the field of human actions. While stem cells can give rise to specialized cells and thus organs, essential concepts allow building unicist objects.



Unicist objects are adaptive systems that have a concept and generate added value within a quality assurance system to fulfill the purpose of the concept. Unicist objects are interdependent entities that integrate a complex adaptive system.

The knowledge of the essential concepts is basic to build unicist objects because these objects are the materialization of a concept.

Under certain conditions, organs can be transplanted and this is also the case of unicist objects that can be replicated as long as they belong to homologous and analogous entities.

Objects are inserted into processes to produce specific results. The same way stem cells have the potential capacity to give birth to human organs, concepts can give birth to objects to produce results.

The knowledge of the Unicist Theory allows using a double dialectical approach to reality to emulate the organization of nature using an object driven organization.

Nature is organized by objects which can be observed in the ecosystem. The human body is an example of the organization of nature, where organs are homologous to unicist objects. That is why the transplantation of organs became possible.

While the structure of the different organs of the body derives from the stem cells, the unicist objects derive from the essential function of an entity that is defined by its concept. Thus, stem cells and concepts are homologous.

While essential concepts allow the construction of objects to insert into human adaptive processes, stem cells allow the building of organs that work as unicist objects to sustain the functionality of a complex adaptive system such as the human body.

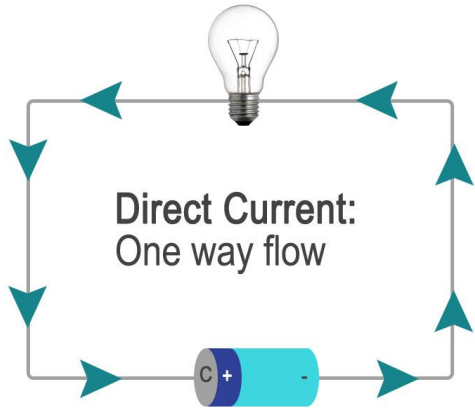
Properties of Stem Cells and Concepts

Stem Cells	Concepts
• They are unspecialized • They are capable of self-renewal • They can give rise to specialized cells	• They are universal • They are timeless • They allow building operational functions

Evidence VII:
Thinking Processes and the Functionality of Electricity

Direct Current

Direct current flows in a single direction. Its intensity can vary in time but the direction does not.



Dualistic Thinking (Logic)

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

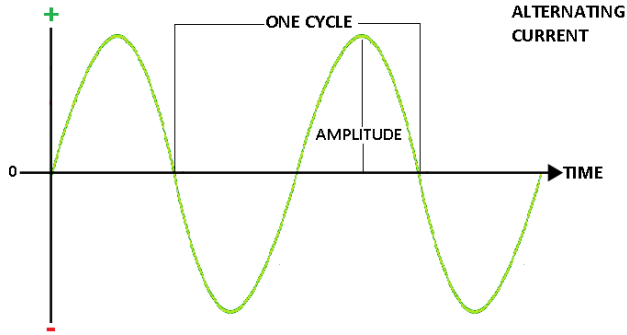
Dualistic thinking is based on moving in a single direction to avoid the influences of the environment. It requires using the disjunction "or" to avoid changing the direction of the action.

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

Alternating current implies that the charge carriers reverse their direction periodically.



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.

Part IV
Main Discoveries and Applications in Complex Adaptive Systems

Main Researches on Complex Adaptive Systems made at The Unicist Research Institute

Discoveries - Basic Sciences

• Unicist Ontogenetic Intelligence of Nature
• Unicist Logic: The Double Dialectical Logic
• Unicist Anthropology
• Unicist Ontology to deal with adaptive systems
• The Ontogenetic Structure of Concepts
• Analogy between the Nature of Concepts and the DNA
• Unicist Mechanics & Quantum Mechanics
• Unicist Ontology of Evolution
• Unicist Ontology of Human Intelligence
• The Ontogenetic Maps
• Homology between the unicist ontological structure, the atomic structure, biology and electricity
• The Unicist Complexity Science Research to deal with Adaptive Systems
• The Nature of Semiosis
• What are Complexity Sciences?
• Discovery of the Behavior of Objects in Complex Adaptive Systems
• Development of the Mathematical Foundations of Reality Indicators
• Discovery of the Structure of the Emulation of Reality
• Synthesis of Conceptual Psychology
• Functionality of Dualistic Logic in Complex Environments
• Discovery of the Structure of Aprioristic Fallacies
• Discovery of the Unicist Ontology of Complementation

Life Science Research

• The Development of the Scientific Foundations of Medicine
• The Unicist Ontology of Health
• The Unified Field of Healthcare
• The Unicist Ontology of Amino Acids
• Homology between Concepts and Stem Cells
• The Ontogenetic Intelligence of Nature
• Unicist Destructive Tests in Biology

• Unicist Non-destructive Tests in Biology
• The Fallacy of Organs and Chronic Diseases
• The Unicist Structure of Viruses
• The Ontogenetic Map of Chronic Diseases
• The Ontogenetic Map of Addictions
• The Ontogenetic Map of Stress
• The Ontogenetic Map of Cure
• The Ontogenetic Map of Immune Systems
• The Ontogenetic Map of Therapeutics
• The Ontogenetic Map of Diseases
• The Ontogenetic Map of Medical Specialties
• Unicist Universal Diagnoses
• The Ontogenetic Map of Patients
• Conceptual Psychology
• The Roots of Human Intelligence
• The Universal Structure of Evolution and Involution
• The Ontogenetic Map of Complex Adaptive Systems
• The Ontogenetic Map of Clinical Trials
• The Ontogenetic Map of Research & Researchers
• The Ontogenetic Map of Healthcare Organizations
• The Ontogenetic Map of Prevention
• Unicist Universal Quality Assurance
• Unicist Universal Decision Making

Basics of Future Research

• The Unicist Ontology to Infer the Future
• The Unicist Ontology of Evolution
• The Basics of Social Evolution
• The Unicist Ontology of Cultural Evolution
• The Unicist Ontology of Cultural Involution
• The Unicist Ontology of Psychopathy in Leadership
• The Unicist Human Spiral Evolution & Involution
• The Unicist Ontology of Human Evolution and Involution
• The Unicist Laws of Evolution
• The Unicist Ontology of Social Mutation
• The Unicist Ontology of Institutional and Cultural Adaptiveness
• The Nature of Cultural Stagnation
• The Unicist Anthropology
• The Unicist Logic and its Mathematics
• Unicist Thinking: The double dialectical thinking

• The Unicist Ontology of Time Management and Time Drivers
• The Unicist Ontogenetic Algorithms
• The Structure of Unicist Ontogenetic Maps
• The Unicist Ontology of Change Agents
• Fundamental Analysis & Technical Analysis
• The Unicist Fundamental Technology
• Discovery of the Structure of the Unicist Ontology
• The Discovery of Ethical Intelligence
• Confirmation of the Functionality of Ethical Intelligence in Future Research
• Development of the 10-year Scenario for Consumer Markets (2014-2024)
• Development of the 10-year Scenario for Healthcare (2014-2024)
• Development of the 10-year Scenario for Virtual Collaboration (2014-2024)
• Development of the 10-year Scenario for Marketing (2014-2024)
• Development of the 10-year Scenario for Internet (2014-2024)
• Development of the 10-year Scenario for Superior Education in Business (2014-2024)

Main Discoveries in Businesses and Institutions

The discovery of the unicist ontology of institutions and the development of the ontogenetic maps and the unicist ontogenetic algorithms of their functions made institutions and businesses reasonable, understandable and predictable.

Business Modeling

• The Unicist Ontology of Natural Models in Business Evolution
• The Unicist Ontology of Institutions
• The Unicist Ontology of Enterprises
• The Unicist Ontology of Entrepreneurs
• The Unicist Ontology of Business Modeling
• The Unicist Ontology of Business Process Modeling
• The Principles of Organizational Equilibrium
• The Unicist Ontology of Butterfly Companies
• The Unicist Ontology of Human Complex Adaptive Systems
• The Unicist Ontology of Organizational Meta-models

Business Strategy

• The Unicist Ontology of Universal Strategy Building

- The Unicist Ontology of Specific Strategy Building
- The Unicist Ontology of the Strategic Attitude
- The Unicist Ontology of Non-Influential Strategies
- Responsibility and its relation with the amplitude of a unified field in business
- The Unicist Ontology of Family Businesses
- The Unicist Ontology of Proactive Responsibility
- The Unicist Ontology of Organizational Strategy towards Natural Organization

Business Growth

- The Unicist Ontology of Economic Growth
- The Unicist Ontology of Business Synergy
- The Unicist Ontology of Credibility
- The Unicist Ontology of Market Confrontations of Supremacy
- The Unicist Ontology of Dominance Market Confrontations
- The Unicist Ontology of Market Confrontations of Conquest
- The Unicist Ontology of Negotiations
- The Unicist Ontology of Object Driven Value Generation

Business Architecture

- The Unicist Ontology of Architecture & Architects
- The Unicist Ontology of Functional Business Architecture
- The Unicist Ontology of Organizational Design
- Unicist Project Management
- The Unicist Ontology of Adaptive Systems for Work
- The Unicist Ontology of Client Centered Management
- The Unicist Ontology of the Organizational Immune System
- Unicist Hyperrealism in Business
- The Unicist Ontology of Adaptive System Design
- Development of Unicist Virtual Collaboration

Business Diagnostics

- The Unicist Ontology of Diagnoses
- The Unicist Ontology of Business Diagnostics
- The Unicist Ontology of Decision Making
- The Unicist Ontological reverse engineering approach
- The Unicist Ontology of the Apprehension of a Unified Field in Business
- The Unicist Ontology of Pilot Testing

Production Management

- The Unicist Ontology of Continuous Improvement
- The Unicist Ontology of Quality Assurance

• The Unicist Ontology of Insourcing
• The Unicist Ontology of Outsourcing
• The Unicist Ontology of Cybernetics

Object Driven Organization

• The Unicist Ontology of the Object Driven Organization
• The Unicist Ontology of Natural Organization
• The Unicist Ontology of Business Objects Design
• The Unicist Standard for Business Objects Design
• The Unicist Ontology of Business Platforms Building
• The Unicist Ontology of Object Driven Management
• The Unicist Ontology of Performance Management

Business Objects

• The Unicist Ontology of Cognitive Objects
• The Unicist Ontology of Objects
• The Unicist Ontology of Functional Objects
• The Unicist Ontology of Operational Objects
• The Unicist Ontology of Systemic Objects
• The Unicist Ontology of the Functionality of Business Objects

Marketing & Sales

• The Unicist Ontology of Marketing Mix
• The Unicist Ontology of Functional Segmentation
• The Unicist Ontology of Market Segmentation
• The Unicist Ontology of a Commercial Catalyst
• The Unicist Ontology of Object Driven Marketing of Rational Products / Services
• The Unicist Ontology of Object Driven Marketing of Ethical Products and Services
• The Unicist Ontology of Object Driven Marketing of Impulsive Buying
• The Unicist Ontology of Aesthetics
• The Unicist Ontology of Institutional Selling
• Discovery of the Structure of Subliminal Decision-making
• Development of Unicist Network Marketing
• Development of Unicist Commercial Objects
• Development of Unicist Semantic Objects
• Development of Unicist Virtual Collaboration

Information Technology Architecture

• The Unicist Design Methodology: Unicist XD
• Unicist Project Management

• The Unicist Ontology of Workstation Automation
• The Unicist Ontology of Robotics
• Development of Unicist Adaptive Robotics
• Development of Unicist Business Robots - U-DROIDS
• Development of Predictive Interfaces

Human Resources

• The Unicist Ontology of Peopleware
• The Unicist Ontology of Professionalism in Business
• The Building of Human Capital: an ontological approach
• Unicist Ontology of In-Company Corporate Universities
• The Unicist Ontology of Human Process Catalysts
• The Unicist Ontology of Doers
• The Unicist Ontology of Leadership
• The Unicist Ontology of the Adults' Learning Context
• The Unicist Ontology of Human Learning
• Discovery of the Structure of Subliminal Decision-making
• Development of Unicist Virtual Collaboration

Innovation, Change Management and R&D

• The Unicist Ontology of Innovation
• The Unicist Ontology of Change Management
• Ontological Structure of the Unified Field in Business
• The Unicist Ontogenetic Algorithm
• The Unicist Ontology of Intellectual Capital
• The Unicist Ontology of Research
• The Unicist Ontology of Unified Fields in Nature
• The Unicist Complexity Science Research to deal with Adaptive Systems

Business Therapeutics

• The Unicist Ontology of Evolution and Involution Cycles in Unicist Institutional Therapeutics
• The Unicist Ontology of the Cure for Businesses
• The Unicist Ontology of Institutional Syndromes and Cures
• The Unicist Ontology of Business Hackers
• The Unicist Ontology of Business Viruses
• The Unicist Ontology of the Factor Zero
• The Unicist Ontology of Social Viruses at Work
• The Unicist Ontology of the Context for Business Virus Multiplication
• The Unicist Ontology of the Segments of Business Viruses
• The Unicist Ontology of Business Viruses that Destroy Competitiveness

Main Discoveries in Adaptive Educational Processes

The R&D in the field of education began in the seventies. It was centrally focused on finding the drivers of human learning in the field of adaptive behavior. It drove to the discovery of the structure of those learning processes that promote adaptiveness and the generation of added value in an environment.

Intrapersonal Intelligence

- The Unicist Ontology of Inner Freedom
- The Unicist Ontology of Reflection
- The Unicist Ontology of Consciousness
- The Unicist Ontology of Assimilation / Introjection Processes
- The Unicist Ontology of Discrimination Power
- Stages of the Consciousness Building Process
- The Unicist Ontology of Internal Speed
- The Unicist Ontology of forward-chaining and backward-chaining thinking
- The Relation between Complexity Management and Human Fears
- The Unicist Ontology of Languages as Reasoning Structures
- The Unicist Ontology of the Apprehension of Ontologies
- The Unicist Ontology of Decision Making

Interpersonal Intelligence

- The Unicist Ontology of External Freedom
- The Unicist Ontology of Proactive Responsibility
- The Unicist Ontology of the Solitude of Power
- The Unicist Ontology of Credibility
- The Unicist Ontology of Ambiguous Language
- The Unicist Ontology of Ambiguous Perception
- The Unicist Ontology of the Use of Words in the Building of Minimum and Maximal Strategies
- The Unicist Ontology of Language
- The Unicist Ontology of Messages

Human Learning Basics

- The Unicist Ontology of Human Learning
- The basics of Learning New Skills to Solve Complex Problems
- The Unicist Ontology of Personal Power

- The Unicist Ontology of Learning Processes
- The Unicist Ontology of the Adults' Learning Context
- The Unicist Ontology of the Ethical Intelligence
- The Unicist Ontology of Wisdom
- The Structure of Ontointelligence
- The Unicist Ontology of Doers
- The Unicist Ontology of Reading the Nature of Reality
- The Ontogenesis of Ethical Intelligence
- The Unicist Ontology of Emulation of Reality
- The Unicist Taxonomy of Complex Problem Solving
- The Unicist Ontology of Innovation
- The Unicist Ontology of Fundamental and Technical Analysis
- The Unicist Ontology of Leadership
- The Unicist Ontology of Ambiguity
- The Unicist Ontology of Research
- Discovery and Development of Learning Objects
- Development of the Unicist Ontology of Erudition and Wisdom
- Development of Unicist Semantic Objects
- Development of Unicist Learning Objects
- The Unicist Ontology of Words' Functionality
- The Unicist Ontology of Figurative Communication

Main Discoveries applied to the Healthcare Business

The discovery of the ontogenetic intelligence of nature opened the possibilities of understanding the ontological structure of living beings and dealing with complex problems like medicine. This was materialized in the unicist approach to health and healthcare management which promotes an adaptive medical objects-driven approach that integrates the feedback of medical actions.

Life Science Research

- The Unicist Ontology of Health
- The Unified Field of Healthcare
- The Unicist Ontology of Amino Acids
- Homology between Concepts and Stem Cells
- The Ontogenetic Intelligence of Nature
- Unicist Destructive Tests in Biology

• Unicist Non-destructive Tests in Biology
• The Fallacy of Organs and Chronic Diseases
• The Unicist Structure of Viruses
• The Ontogenetic Map of Chronic Diseases
• The Ontogenetic Map of Addictions
• The Ontogenetic Map of Stress
• The Ontogenetic Map of Cure
• The Ontogenetic Map of Immune Systems
• The Ontogenetic Map of Therapeutics
• The Ontogenetic Map of Diseases
• The Ontogenetic Map of Medical Specialties
• Unicist Universal Diagnoses
• The Ontogenetic Map of Patients
• Conceptual Psychology
• The Roots of Human Intelligence
• The Universal Structure of Evolution and Involution
• The Ontogenetic Map of Complex Adaptive Systems
• The Ontogenetic Map of Clinical Trials
• The Ontogenetic Map of Research & Researchers
• The Ontogenetic Map of Healthcare Organizations
• The Ontogenetic Map of Prevention
• Unicist Universal Quality Assurance
• Unicist Universal Decision Making

Business Diagnostics

• The Unicist Ontology of Diagnoses
• The Unicist Ontology of Business Diagnostics
• The Unicist Ontology of Decision Making
• The Unicist Ontological reverse engineering approach
• The Unicist Ontology of the Apprehension of a Unified Field in Business
• The Unicist Ontology of Pilot Testing

Operation Management

• The Unicist Ontology of Continuous Improvement
• The Unicist Ontology of Quality Assurance
• The Unicist Ontology of Insourcing
• The Unicist Ontology of Outsourcing
• The Unicist Ontology of Cybernetics
• Development of Unicist Virtual Collaboration

Object Driven Organization

• The Unicist Ontology of the Object Driven Organization

• The Unicist Ontology of Natural Organization
• Development of Patient Centered Management

Medical/Business Objects

• The Unicist Ontology of Cognitive Objects
• The Unicist Ontology of Objects
• The Unicist Ontology of Functional Objects
• The Unicist Ontology of Operational Objects
• The Unicist Ontology of Systemic Objects
• The Unicist Ontology of the Functionality of Business Objects
• Development of Unicist Virtual Collaboration
• Development of Patient Centered Management

Business Modeling

• The Unicist Ontology of Natural Models in Business Evolution
• The Unicist Ontology of Institutions
• The Unicist Ontology of Enterprises
• The Principles of Organizational Equilibrium
• The Unicist Ontology of Human Complex Adaptive Systems
• The Unicist Ontology of Organizational Meta-models

Business Strategy

• The Unicist Ontology of Universal Strategy Building
• The Unicist Ontology of Specific Strategy Building
• The Unicist Ontology of the Strategic Attitude

Business Architecture

• The Unicist Ontology of Architecture & Architects
• The Unicist Ontology of Functional Business Architecture
• The Unicist Ontology of Organizational Design
• Unicist Project Management
• The Unicist Ontology of Adaptive System Design
• Development of Unicist Virtual Collaboration
• Development of Patient Centered Management

Innovation, Change Management and R&D

• The Unicist Ontology of Innovation
• The Unicist Ontology of Change Management
• Ontological Structure of the Unified Field in Business
• The Unicist Ontogenetic Algorithm
• The Unicist Ontology of Intellectual Capital

• The Unicist Ontology of Research
• The Unicist Ontology of Unified Fields in Nature
• The Unicist Complexity Science Research to deal with Adaptive Systems

Business Therapeutics

• The Unicist Ontology of Evolution and Involution Cycles in Unicist Institutional Therapeutics
• The Unicist Ontology of the Cure for Businesses
• The Unicist Ontology of Institutional Syndromes and Cures
• The Unicist Ontology of Business Viruses that Destroy Competitiveness

Marketing

• The Unicist Ontology of Marketing Mix
• The Unicist Ontology of Functional Segmentation
• The Unicist Ontology of Market Segmentation
• The Unicist Ontology of a Commercial Catalyst
• The Unicist Ontology of Object Driven Marketing of Ethical Products and Services
• The Unicist Ontology of Aesthetics
• The Unicist Ontology of Institutional Selling
• Development of Unicist Network Marketing
• Development of Unicist Commercial Objects
• Development of Unicist Semantic Objects

Information Technology Architecture

• The Unicist Design Methodology: Unicist XD
• Unicist Project Management
• Development of Unicist Adaptive Robotics
• Development of Unicist Business Robots - U-DROIDS
• Development of Predictive Interfaces

Human Resources

• The Unicist Ontology of Peopleware
• The Unicist Ontology of Professionalism in Business
• The Building of Human Capital: an ontological approach
• Unicist Ontology of In-Company Corporate Universities
• The Unicist Ontology of Human Process Catalysts
• The Unicist Ontology of Doers
• The Unicist Ontology of Leadership
• The Unicist Ontology of the Adults' Learning Context
• The Unicist Ontology of Human Learning

Main Discoveries in Social Behavior (on Cultures and Countries)

The discovery of the unicist anthropology and the ontological structure of cultures made the definition of countries' archetypes possible, making country scenarios transparent and allowing the prediction of their evolution.

Basics for Future Scenario Building

- The Unicist Ontology to Infer the Future
- The Unicist Ontology of Evolution
- The Basics of Social Evolution
- The Unicist Ontology of Cultural Evolution
- The Unicist Ontology of Cultural Involution
- The Unicist Ontology of Psychopathy in Leadership
- The Unicist Human Spiral Evolution & Involution
- The Unicist Ontology of Human Evolution and Involution
- The Unicist Laws of Evolution
- The Unicist Ontology of Social Mutation
- The Unicist Ontology of Institutional and Cultural Adaptiveness
- The Nature of Cultural Stagnation
- The Unicist Anthropology
- The Unicist Logic and its Mathematics
- Unicist Thinking: The double dialectical thinking
- The Unicist Ontology of Time Management and Time Drivers
- The Unicist Ontogenetic Algorithms
- The Structure of Unicist Ontogenetic Maps
- The Unicist Ontology of Change Agents
- Fundamental Analysis & Technical Analysis
- The Unicist Fundamental Technology
- Discovery of the Structure of the Unicist Ontology
- The Discovery of Ethical Intelligence
- Confirmation of the Functionality of Ethical Intelligence in Future Research
- Development of the 10-year Scenario for Consumer Markets (2014-2024)
- Development of the 10-year Scenario for Healthcare (2014-2024)
- Development of the 10-year Scenario for Virtual Collaboration (2014-2024)
- Development of the 10-year Scenario for Marketing (2014-2024)
- Development of the 10-year Scenario for Internet (2014-2024)
- Development of the 10-year Scenario for Superior Education in Business (2014-2024)

Future Scenario Building

• The Unicist approach to Scenario Building
• Discovery of the Unicist Anthropology
• The Unicist Complexity Science Research to deal with Adaptive Systems
• The Unicist Ontology of Country Archetypes
• The Unicist Ontology to be used in Future Research applied to the Evolution of Societies
• Unicist Ontological drivers of the Evolution of Countries
• The Unicist Ontology of Historical Evolution
• The Unicist Ontology of the Collective Unconscious
• Development of the Unicist Ontology of Social, Economic and Political Democracy

Economic Scenario

• The Unicist Ontology of a Country's Economic Scenario
• The Unicist Ontology of Economic Behavior
• The Unicist Ontology of Economic Growth
• The Unicist Ontology of Economic Power
• The Unicist Ontology of Innovation
• The Unicist Ontology of Social Critical Mass
• The Unicist Ontology of Wealth and Poverty
• Synthesis of Conceptual Economics
• Functionality of Religions in Social Behavior
• Innovation Blindness
• The Relation between Complexity Management and Human Fears

Political Scenario

• The Unicist Ontology of a Country's Political Scenario
• The Unicist Ontology of Democracy
• The Unicist Ontology of Absolute Ideologies and Fallacious Myths
• The Unicist Ontology of Ideologies
• The Unicist Ontology of Social and Individual Ideologies
• The Unicist Ontology of the State-Nation Concept
• The Unicist Ontology of Oedipus Complex and the Evolution of Species

Social Scenario

• The Unicist Ontology of a Country's Social Scenario
• The Unicist Ontology of Lifestyles
• The Unicist Ontology of Social Institutionalization
• The Unicist Ontology of Social Taboos
• The Unicist Ontology of Fundamentalism

• The Unicist Ontology of Social Myths and Fallacious Myths
• The Unicist Ontology of Social Power
• The Unicist Ontology of Social Utopias

Cultural Scenario

• The Unicist Ontology of Transcendent Goals
• The Unicist Ontology of Countries' Cultural Change
• The Unicist Ontology of Ideological Change
• The Unicist Ontology of Institutionalization as the Driver to Growth
• The Unicist Ontology of the
• The Unicist Ontology of Stagnant Survivors
• The Unicist Ontology of Inner Freedom

Educational and Scientific Scenario

• The Unicist Ontology of Educational Culture
• The Unicist Ontology of Language
• The Unicist Ontology of Fallacies
• The Unicist Ontology of the Adults' Learning Context
• The Unicist Ontology of Ambiguous Language
• The Unicist Ontology of Time Management and Time Drivers
• The Unicist Ontology of Leadership
• The Unicist Ontology of Credibility
• The Unicist Ontology of forward-chaining and backward-chaining thinking

Sustainable Globalization Scenario

• The Unicist Ontology of the Sustainable Globalization
• The Unicist Ontology of Cooperation Building
• The Unicist Ontology of Diplomacy
• The Unicist Ontology of the Power of Diplomacy
• The Unicist Ontology of Dissuasion Power
• The Unicist Ontology of Negotiations
• The Unicist Ontology of the Operational Power of Nations
• The Unicist Ontology of the Power of Nations
• Discovery of the Cultural, Institutional, Individual and Social Archetypes

Main Discoveries in Human Intelligence and Behavior

The discovery that the concepts of individuals drive their attitudes and their ethical intelligence defines their intentions allowed integrating the psychological drivers and inhibitors with the conscious intelligence of individuals in a unified field to expand the possibilities of personal evolution.

Strategic Intelligence

- The Unicist Ontology of Universal Strategy Building
- The Unicist Ontology of Specific Strategy Building
- The Unicist Ontology of the Strategic Attitude
- The Unicist Ontology of Non-Influential Strategies
- The Unicist Ontology of Professionalism
- Unicist Thinking: the Double Dialectical Thinking
- The Unicist Ontology of Time Management and Time Drivers
- The Unicist Ontology of Timing
- The Unicist Ontology of Emulation of Reality
- The Unicist Taxonomy of Complex Problem Solving
- The Unicist Ontology of Innovation
- The Unicist Ontology of Fundamental and Technical Analysis
- The Unicist Ontology of Leadership
- The Unicist Ontology of Ambiguity
- The Unicist Ontology of Research

Interpersonal Intelligence

- The Unicist Ontology of External Freedom
- The Unicist Ontology of Proactive Responsibility
- The Unicist Ontology of the Solitude of Power
- The Unicist Ontology of Credibility
- The Unicist Ontology of Ambiguous Language
- The Unicist Ontology of Ambiguous Perception
- The Unicist Ontology of the Use of Words in the Building of Minimum and Maximal Strategies
- The Unicist Ontology of Language
- The Unicist Ontology of Messages
- The Unicist Ontology of Words' Functionality
- The Unicist Ontology of Figurative Communication

Intrapersonal Intelligence

• The Unicist Ontology of Inner Freedom
• The Unicist Ontology of Reflection
• The Unicist Ontology of Consciousness
• The Unicist Ontology of Assimilation / Introjection Processes
• The Unicist Ontology of Discrimination Power
• Stages of the Consciousness Building Process
• The Unicist Ontology of Internal Speed
• The Unicist Ontology of forward-chaining and backward-chaining thinking
• The Relation between Complexity Management and Human Fears
• The Unicist Ontology of Languages as Reasoning Structures
• The Unicist Ontology of the Apprehension of Ontologies
• The Unicist Ontology of Decision Making
• Development of the Unicist Q Method

Ethical Intelligence

• The Unicist Ontology of the Ethical Intelligence
• The Unicist Ontology of Wisdom
• The Structure of Ontointelligence
• The Unicist Ontology of Doers
• The Unicist Ontology of Reading the Nature of Reality
• The Ontogenesis of Ethical Intelligence
• The Unicist Ontology of Human Learning
• The basics of Learning New Skills to Solve Complex Problems
• The Unicist Ontology of Personal Power
• The Unicist Ontology of Learning Processes
• The Unicist Ontology of the Adults' Learning Context

Anti-intelligence (to build inhibiting objects)

• Discovery of the Unicist Ontology of Anti-intelligence
• The Unicist Ontology of the In-capacity to deal with Ignorance
• The Unicist Ontology of Psychopatic Manipulation
• The Unicist Ontology of Psychopathy in Leadership
• The Unicist Ontology of Smart Alecks in Business
• Unicist Ontology of Active Inaction
• The Structure of Innovation Blindness
• The Unicist Ontology of Human Essential Complexes
• The Unicist Ontology of Oedipus-Complex and the Evolution of Species
• The Unicist Ontology of Inferiority and Superiority Complexes
• The Unicist Ontology of Anti-Institutions
• The Anti-Object Driven Organization
• The Unicist Ontology of Anti-Credibility

- The Unicist Ontology of Anti-Professionalism in Business
- The Unicist Ontology of Anti-Strategies
- Innovation Blindness
- The Unicist Ontology of Fallacies
- The Unicist Ontology of Stagnant Survivors
- The Unicist Ontology of Perception Fallacies
- The Unicist Ontology of Pseudo Freedom
- The Unicist Ontology of Anti-consciousness

Scientific Applications of the Unicist Theory that changed paradigms of existing Sciences:

In Scientific Research - 1980: Development of a unicist ontological methodology for complex systems research, substituting the systemic approach to research adaptive systems. **2014:** The integration of the unified field of macro and micro behavior. **2015:** Development of the destructive and non-destructive tests to research adaptive environments.

In Life Sciences - 1988: Discovery of the functional structure that regulates evolution and the unicist ontological structure of living beings as a unified field. **2006**: Discovery of the unicist ontological algorithm of evolution and involution. **2008:** Discovery of the two types of integration, complementation and supplementation, of elements in complex adaptive systems. **2012:** Discovery of the unicist ontology of biological entities. **2013:** Confirmation of the unicist ontology of viruses. **2014:** Discovery of the ontological structure of chronic diseases. **2014:** Discovery of the structure of therapeutics. **2015:** Discovery of the ontological structure of health. **2016:** Development of the Scientific Foundations of Medicine.

In Complexity Sciences - 1998: Development of the unicist ontology emulating the ontogenetic intelligence of nature. **2003:** Discovery of the anti-concepts that work as antimatter. **2006:** Development of objects to manage human adaptive systems emulating the structure of nature. **2011:** Discovery of the unicist ontology of complex adaptive

systems. **2014:** Discovery of the behavior of objects in complex adaptive systems. **2015:** Discovery of the essential opposition but operational complementation between the active function and the energy conservation function of concepts.

In Information Sciences – 2002: Development of unicist ontogenetic based ontologies replacing the empirically structured ontologies. **2014:** Development of unicist adaptive robotics. **2015:** Development of prototypers. **2016:** Discovery of the nature of conceptual design.

In Future Research and Strategy - 1984: Modeling of the ontological structures that allow inferring the evolution developing the ontogenetic maps of human adaptive systems. **2014:** Confirmation of the functionality of ethical intelligence in future research. **2015:** Discovery of the unicist ontology of personal strategies. **2016:** Discovery of the nature of entrepreneurial strategies.

In Logic - 1986: Development and formalization of the integrative and the unicist logic. **2013:** Functionality of Dualistic Logic in complex environments. **2013:** Discovery of the structure of aprioristic fallacies.

In Anthropology - 1986: Discovery of the "invariables" of human behavior. **1997:** Discovery of the double dialectical behavior. **2008**: Discovery of the anthropological lifestyles. **2010:** Discovery of the institutional and social viruses. **2012:** Discovery of the integration of ontogeny and phylogeny. **2012:** Discovery of the stagnant survivors' role in societies. **2012:** Discovery of the unicist ontological structure of aptitudes, attitudes and intentions. **2013:** Development of the unicist ontology of cultural adaptiveness & over-adaptiveness. **2014:** Synthesis of Conceptual Anthropology.**2014:** Discovery of the Cultural, Institutional, Individual and Social Archetypes. **2015:** Discovery of the functionality of rationalism and subjectivism as social and individual addictions. **2016:** Discovery of the nature of innovation processes.

In Economic Science - 1989: Discovery of the unicist ontological structure of Economics. **1998:** Discovery of the unicist ontological algorithm of the price elasticity of demand. **2004:** Discovery of the ontogenetic structure of economic models and their functionality. **2011:** Discovery of the ontology of currency and inflation. **2012:** Discovery of the ontology of the industrialization level. **2012:** Discovery of the unicist ontology of the overcoming of scarcity. **2012:** Pricing of Futures and Options. **2012:** Discovery of the unicist ontology of speculative manipulation. **2014:** Synthesis of Conceptual Economics. **2015:** Discovery of the unicist ontology of economic freedom.

In Political Science - 1990: Development of the ontological algorithm and the ontogenesis and phylogeny of ideologies and their functionality. **2013:** Development of the unicist ontology of Social, Economic and Political Democracy.

In Social Sciences - 1993: Discovery of the collective unconscious and the unicist archetypes of cultures. **2012:** Discovery of the role of stagnant survivor elites in the stagnation of segments or cultures. **2016:** Discovery of the nature of social networks.

In Linguistics – 2004: Discovery of the unicist ontological algorithms of natural, ambiguous and figurative languages and the unicist ontology of words. **2014:** Development of semantic objects. **2015:** Discovery of the ontological structure of subliminal communication.

In Mathematics - 1996: Development of the conceptual basis of interdependent, dependent and independent variables. **2014:** Development of the mathematical foundations of reality indicators.

In Philosophy - 1994: Development of the unicist ontology integrating philosophy, science and action in a unified field. **1997:** Refutation of Hegel's and Marx's dialectics and the formulation of the laws of the double dialectics.

In History - 2000: Development of a historical analysis methodology based on the unicist double dialectics.

In Cognitive Science - 2001: Development of a methodology to construct knowledge with existing information through an integrative logic. **2002:** Development of the unicist reflection methodology to deal with the nature of reality. **2006**: Discovery of the object driven organization of mental processes and the development of cognitive objects. **2008:** Development of the ontological algorithms of fundamental analysis. **2013:** Development of the unicist ontology of erudition and wisdom (observers vs. participants). **2014:** Discovery of the structure of the emulation of reality. **2015:** Discovery of the unicist ontology of conceptualization.

In Education - 1979: Discovery of the ontogenetic algorithms of learning which has given scientific sustainability, amongst others, to Piaget. **2014:** Discovery and development of learning objects. **2015:** Development of Reflection Driven Education. **2016:** Discovery of the nature of learning by teaching.

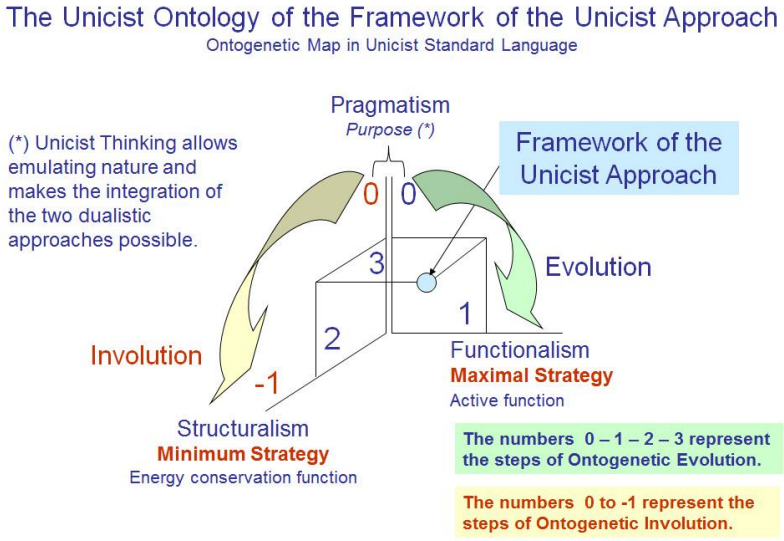
In Psychology - 1984: Discovery of human ontointelligence to deal with adaptive systems. **2003:** Discovery of the unicist ontological structure of fallacies, the functionality of anti-intelligence and anti-intuition. **2004:** Discovery of the double dialectical thinking process. **2005:** Discovery of the unicist ontology and evolution laws of human essential complexes. **2011:** Discovery of the ontology of conscious behavior. **2012:** Discovery of the ontology of complementation of thinking processes. **2012:** Discovery of the unicist ontology of psychopathy. **2014:** Discovery of the structure of subliminal decision-making. **2014:** Synthesis of Conceptual Psychology. **2015:** Functionality of concepts as behavioral objects. 2016: Discovery of the nature of human metamorphosis. **2016:** Discovery of the functionality of thinking processes.

In Semiology - 2012: Discovery of the unicist ontology of semiosis as a complex adaptive system. **2015:** Development of semiotic role objects.

Part V
Scientific Framework of the Unicist Theory

Scientific Framework of the Unicist Approach to Complexity Sciences

The unicist approach to complexity science was developed in order to provide a methodology that is specific to deal with complex adaptive systems in order to avoid the extension of the use of methodologies that correspond to the field of researching systemic aspects of reality.



This drove towards the integration of a pragmatic, structural and functionalist approach to research in the field of complexity sciences that is the framework used in all the researches done at The Unicist Research Institute.

Pragmatism

The research in the field of complex adaptive systems does not allow artificial experiments because they change the conjunction of elements that integrate them.

Therefore, a pragmatic approach that integrates practice and theory is needed. This implies that complexity science requires the integration of reliable knowledge (theory) with experiencing (practice) in order to define the functionality of a complex adaptive system.

The Unicist pragmatism is based on the integration of theory and practice based on the knowledge of the ontogenetic map of the specific aspects of reality which include their fundamentals.

Unicist pragmatism is based on the unicist reflection process (action-reflection-action) and the use of destructive tests to establish the limits of the theoretical knowledge and non destructive tests to put pragmatism into action.

If you are not aware of the meaning of the word pragmatic, we strongly recommend researching the concept “pragmatism”.

Functionalism

Complex adaptive systems need to be approached based on the emergence they generate. A functionalist approach is needed to apprehend the functionality of the system.

Apprehending the functionality implies integrating the purpose, which is implicit in its emergences, with the active function and the energy conservation function. This allows defining the functionality of a complex adaptive system.

The conceptual structure of a given reality defines its ontogenetic map and drives its action process and evolution.

The conceptual functionalism is based on the apprehension of the conceptual structure of a given reality in order to understand its functionality and evolution. It is measured based on the consequences of actions.

Conceptual structures cannot be taught because they require being able to emulate a specific reality in mind. Therefore, their apprehension can only be fostered. This requires using the unicist pragmatic approach to apprehend a concept.

If you are not aware of the meaning of the word functionality, we strongly recommend researching the concept “functionalism”.

Structuralism

A complex adaptive system has, by definition, open boundaries. That is why it is required that the system be integrated with the restricted and wide contexts that influence it.

Therefore, a structural approach is needed to integrate the system with its context and the environment to make it reasonable, understandable and predictable.

The unicist ontological structuralism is based on apprehending the unified field of a specific aspect of reality integrating its ontogenetic map with the unicist ontological structures of the restricted and wide context.

The unicist ontological structure requires apprehending the drivers, inhibitors, entropy inhibitors, catalysts and gravitational aspects that are included in the unified field.

If you are not aware of the meaning of the word structural, we strongly recommend researching the concept “structuralism”.

Synthesis

The unicist approach to complexity sciences is a pragmatic, structural and functionalist approach.

This approach establishes the framework for the research on complexity sciences but also for the unicist logical approach that uses the conclusion of the researches in their application in the field of complex adaptive systems.

The Unicist Research Institute

About the Creator of the Unicist Theory

Peter Belohlavek was born on April 13, 1944 in Zilina, Slovakia. His works expanded the boundaries of sciences. He is the creator of:

1. The unicist theory, which explains the dynamics and evolution of living beings and complex adaptive entities.
2. The unicist theory of evolution, which allows developing future research.
3. The epistemological structure of complexity sciences, which allows managing the complex aspects of reality.
4. The unicist theory of the unified field in nature, which allows managing the unified field of complex adaptive systems.

He is the founder of The Unicist Research Institute, a private global research organization specialized in complexity sciences, that has an academic arm and a business arm.

His basic education is in Economic Sciences. To apprehend "reality" as a complex unified field he completed his education with research driven guided studies in Psychology, Epistemology, Anthropology, Economics, Education, Sociology, Life Sciences and Management.

The Unicist Theory made adaptive systems manageable and gave an epistemological structure to complexity sciences. This theory established a new starting point in science which expanded the possibilities of human influence in adaptive environments.

The unicist paradigm shift in sciences drove from an empirical approach to a pragmatic, structuralist and functionalist approach to deal with complex environments, integrating observable facts with the “nature of things”.

This theory allowed managing the adaptive aspects from Life Sciences to Social Sciences. Its application provided the four scientific pil-

lars to develop the unicist technologies: Conceptual Economics, Conceptual Anthropology, Conceptual Psychology and Conceptual Management.

As it is known, the management of complexity has been an unsolved challenge for sciences. Science dealt with complexity using multiple palliatives but without achieving consensus of what complex systems are.

This challenge has been faced in 1976 at The Unicist Research Institute, which became a pioneering organization in the development of concrete solutions to manage the complex adaptive systems by developing a logical approach that uses the Unicist Theory.

He discovered the intelligence that underlies nature, which gave birth to the Unicist Theory, and the ontointelligence that defines the roots of human intelligence. These discoveries and developments expanded the possibilities to upgrade education, to influence social and institutional evolution and to deal with markets.

The unicist logical approach expanded the boundaries of existing sciences. The Unicist Theory was used to develop applications in Life Sciences, Future Research, Business, Education, Healthcare and Social and Human behavior. Now complex adaptive systems became manageable and complexity science received its epistemological structure.

Among other roles, he leads the Future Research Laboratory of The Unicist Research Institute. It is a space to give access to information on country archetypes, future scenarios and trends to the worldwide community.

More information: http://www.unicist.org/peter-belohlavek.php

The Unicist Research Institute was the pioneer in complexity science research and became a private global decentralized leading research organization in the field of human adaptive systems.

More information: http://www.unicist.org/turi.pdf